

**RESOLUTION
R-18-65**

CITY HALL: March 8, 2018

BY: COUNCILMEMBERS WILLIAMS, HEAD, GUIDRY, BROSSETT AND GRAY

**APPLICATION OF ENTERGY NEW ORLEANS, INC. FOR APPROVAL TO
CONSTRUCT NEW ORLEANS POWER STATION AND REQUEST FOR COST
RECOVERY AND TIMELY RELIEF**

**RESOLUTION AND ORDER REGARDING THE APPLICATION OF ENTERGY NEW
ORLEANS, INC. FOR APPROVAL TO CONSTRUCT NEW ORLEANS POWER
STATION AND REQUEST FOR COST RECOVERY AND TIMELY RELIEF**

DOCKET NO. UD-16-02

WHEREAS, pursuant to the Constitution of the State of Louisiana and the Home Rule Charter of the City of New Orleans (“Charter”), the Council of the City of New Orleans (“Council”) is the governmental body with the power of supervision, regulation, and control over public utilities providing service within the City of New Orleans; and

WHEREAS, pursuant to its powers of supervision, regulation and control over public utilities, the Council is responsible for fixing and changing rates and charges of public utilities and making all necessary rules and regulations to govern applications for the fixing and changing of rates and charges of public utilities; and

WHEREAS, Entergy New Orleans, LLC¹ (“ENO” or “Company”), effective September 1, 2015, is a public utility providing electric and natural gas service to all of New Orleans; and

WHEREAS, ENO is a wholly-owned subsidiary of Entergy Utility Holding Company, LLC. The other four operating companies are Entergy Arkansas, Inc. (“EAI”), Entergy

¹ Pursuant to a Council-approved restructuring, that was effective December 1, 2017, Entergy New Orleans, Inc. is now operating as Entergy New Orleans, LLC.

Louisiana, LLC (“ELL”), Entergy Mississippi, Inc. (“EMI”), and Entergy Texas, Inc. (“ETI”). These five operating companies are referred to collectively as the “Operating Companies;” and

Background

WHEREAS, the Council recognizes that a request to authorize ENO to build a new central station generator located within the City of New Orleans is a significant undertaking of considerable interest to ratepayers and the New Orleans community; and

WHEREAS, the Council has been considering the ongoing needs of electric customers in New Orleans in light of the 2016 deactivation of the two natural gas-fired units at the Michoud site for nearly three years; and

WHEREAS, for more than 50 years, the Michoud generating station in New Orleans East served as the cornerstone of ENO’s operating system. ENO’s transmission system was largely designed and evolved around the Michoud plant.² In June of 2016, ENO deactivated Michoud based on consideration of maintenance and operational issues.³ This resulted in the loss to ENO of approximately 781 MW of local generating capacity,⁴ and left New Orleans with no local generating resource within the City; and

WHEREAS, since at least the 1990s until its deactivation, the Michoud generating station was committed to operation during high load periods due to local area voltage and reliability problems, and in the event of transmission constraints and electrical system contingencies in both Entergy’s Amite South and the Downstream of Gypsy (“DSG”) area. For example, in 2008 when Hurricane Gustav struck the region, Michoud provided essential service

² *In re. Supplemental and Amending Application of Entergy New Orleans, Inc.*, Hearing Transcript, Docket No. UD-16-02 (Dec. 18, 2017), 336:4-9 (“Hr’g Tr. 12/18/17”).

³ Direct Testimony and Exhibits of Charles Rice, Jr., Docket No. UD-16-02, at 3:7-8 (June 20, 2016) (“Rice-1”).

⁴ Rice-1 at 3:8.

to New Orleans when other portions of Entergy's system were down.⁵ When ENO began considering the retirement of the last Michoud unit in early 2015, the Council was deeply concerned about ENO's ability to continue to provide reliable service at a reasonable cost with no generation in the City, and particularly with no resource in the eastern region of ENO; and

WHEREAS, during that same time period when ENO was considering deactivation of Michoud, the Council's Utility Advisors ("Advisors") were working with ENO both on negotiating the termination of the Entergy System Agreement⁶ and on ENO's Integrated Resource Planning ("IRP") process. In both of these processes, the Council, the Advisors and ENO discussed ENO's generation deficit and potential solutions to mitigate the risks associated with a total lack of a local resource in New Orleans; and System Agreement Settlement

WHEREAS, for over 50 years, the Entergy Operating Companies operated as a single integrated and coordinated system with their relationships governed by a contract known as the Entergy System Agreement; and

WHEREAS, the Entergy System Agreement provided for sharing and joint planning of transmission and generation and associated costs, which created significant economies of scale for the Operating Companies, and from which ENO, as the smallest of the Operating Companies with the fewest resources of its own, particularly benefitted; and

WHEREAS, the termination of the Entergy System Agreement was, therefore, potentially detrimental to ENO's customers, particularly with the clock already winding down on the remaining life of the existing Michoud units; and

⁵ Direct Testimony and Exhibits of Charles Long, Docket No. UD-16-02, at 13:17-14:3 (June 20, 2016) ("C. Long-1"); Rebuttal Testimony and Exhibits of Charles Long, Docket No. UD-16-02, at 28:1-29:3 (Nov. 30, 2017) ("C. Long-3").

⁶ See Resolution No. R-15-524 (Nov. 5, 2015) (related to Council Docket Nos. UD-13-03 and UD-13-04).

WHEREAS, when negotiations to terminate the Entergy System Agreement began under the auspices of the Federal Energy Regulatory Commission (“FERC”), it was vital to the Council that ENO continue to have access to capacity and energy at a reasonable cost; and

WHEREAS, a filing by Entergy Services, Inc. (“ESI”) at FERC triggered an intervention period which allowed any interested parties to intervene in FERC’s public proceeding regarding the proposal to terminate the System Agreement. Once that intervention period had elapsed, FERC set the proceeding for settlement discussions facilitated by a FERC Administrative Law Judge (“ALJ”);⁷ and

WHEREAS, the Advisors, on behalf of the Council, negotiated with ENO and the other parties to the FERC case in formal settlement proceedings before an ALJ, and a settlement between all parties to the case was ultimately reached. On August 14, 2015, ESI filed the settlement in the public proceeding at FERC.⁸ The Settlement Agreement was subject to the review and approval of the Council as well as of the other regulatory commissions party to the Settlement Agreement; and

WHEREAS, the Settlement Agreement resolved a host of issues. Among these, the Settlement Agreement provided that ENO would explore the possibility of developing peaking generation in New Orleans. It did not mandate, pre-select or pre-approve any particular resource or any particular site. Specifically, the Settlement Agreement provided:

ENO will use reasonable diligent efforts to pursue the development of at least 120 MW of new-build peaking generation capacity within the City of New Orleans. As part of this commitment, ENO will fully evaluate Michoud or Paterson, along with any other

⁷ *Entergy Services, Inc.*, Combined Notice of Filing #2, Docket Nos. ER14-75-000, *et al.* (Oct. 15, 2013). *Entergy Services, Inc.*, Order Conditionally Accepting Notices of Cancellation and Accepting and Suspending Proposed Amendment, Establishing Hearing and Settlement Judge Procedures, and Consolidating Proceedings, 149 FERC ¶61,262 (2014).

⁸ Settlement Agreement of Entergy Services, Docket Nos. ER14-75, *et al.* (Aug. 14, 2015) (“Settlement Agreement”).

appropriate sites in the City of New Orleans, as the potential site for a combustion turbine (“CT”) or other peaking unit to be owned by ENO, or by a third party with an agreed-to PPA to ENO. This evaluation will take into consideration, among other material considerations, the results of the Michoud site analysis that was completed in connection with the Summer 2014 Request for Proposal; and

ENO commits to use diligent efforts to have at least one future generation facility located in the City of New Orleans;⁹

WHEREAS, further, the Settlement Agreement did not assure that any resource would be approved for construction in the City. It reflected the Council’s concern about the deactivation of Michoud, which ENO had long depended on to support reliability in the City, at the same time that the resource sharing contract that had benefitted New Orleans for decades was terminating.¹⁰ In light of this, the Settlement Agreement established ENO’s commitment to examine the potential of a local resource; and

WHEREAS, to the extent that ENO identified an appropriate resource and location, any approval would be subject to the full public interest determination that the Council undertakes in evaluating requests by ENO to add generation to its portfolio of resources serving New Orleans. This was spelled out in the Settlement Agreement, which was filed at FERC subject to formal approval by the Council and the other retail regulators party to the case:

The commitments set forth in this [section] are subject to mutually satisfactory resolution of all material considerations, including, without limitation: (a) financial feasibility for ENO; (b) affordability for ENO customers; (c) economic feasibility in comparison to other potential projects, locations, or alternatives; (d) timely rate recovery; (e) regulatory jurisdiction over such facility(ies) to the extent not owned by ENO; and (f) consistency with sound utility practice and planning principles.¹¹

⁹ *Id.* at 13-14.

¹⁰ Hr’g Tr. 12/18/17, 247:18-248:11.

¹¹ Settlement Agreement at 14.

WHEREAS, before approving the Settlement Agreement, the Council provided all parties affected by it an opportunity to understand the proposal, submit comments and have their views considered.¹² The Council established a procedural schedule that allowed the parties to its proceedings addressing the System Agreement termination (Docket Nos. UD-13-03 and UD-13-04) as well as members of the public, to submit comments and reply comments regarding the proposed Settlement Agreement, which the Council considered in deciding whether to approve the Settlement Agreement. Consistent with the Council's practice generally, the process included the publication of notice of the proceedings; and

WHEREAS, public meetings were held by the Utility, Cable, Telecommunications, and Technology Committee ("UCTTC") and the full Council on September 30 and November 5, 2015, respectively, where the Settlement Agreement was considered. No party or member of the public opposed the Settlement Agreement. On November 5, 2015, the Council adopted Resolution No. R-15-524 which found the FERC Settlement Agreement, including ENO's commitment to use reasonable diligent efforts to pursue development of a peaking resource in the City, to be just and reasonable and in the public interest.¹³ The resolution was made available to the public and was discussed at a UCTTC meeting, which was recorded on video, broadcast and made available over the Council's website;¹⁴ and ENO's IRP Process

WHEREAS, through the Council's IRP proceedings, ENO identifies its long-term resource needs and conducts an economic analysis of what type of resource is likely to be the most economically beneficial in meeting an identified resource need. The IRP does not dictate

¹² Resolution No. R-15-437 at 4 (Sept. 3, 2015).

¹³ Resolution No. R-15-524 at 12.

¹⁴ Videos of Council meetings are available in the Council's online archives, http://www.nolacitycouncil.com/video/video_legislative.asp.

the implementation of specific projects; rather, it identifies the need and gives the utility a general direction to explore in meeting that need; and

WHEREAS, in the course of preparing its 2015 Final IRP in Council Docket No. UD-08-02, ENO engaged in extensive modeling and considered a wide range of future scenarios and resource alternatives. That process identified the Company's substantial need for peaking and reserve capacity;¹⁵ and

WHEREAS, ENO's IRP process provided multiple opportunities for meaningful public participation.¹⁶ The Council has established a collaborative approach to long-term resource planning that provides interested parties access to substantial advance information about ENO's plans to meet its customers' power needs.¹⁷ The IRP process was open to the public to intervene and participate formally as a party to the proceeding, or simply to attend multiple technical conferences to hear about the IRP and present two minutes of verbal comments to the Council in a public hearing regarding the 2015 Final IRP;¹⁸ and

WHEREAS, in the 2015 Final IRP process, the Council set forth four milestones and required that at each one, ENO (1) provide a report from ENO to the Intervenors, Advisors, public, and the Council; (2) hold a technical conference, (3) set up a question and answer period where all parties and members of the public may ask questions over ENO's website with answers publicly posted; (4) allow Intervenors to file comments on ENO's report, and (5) obtain feedback and input from the Council;¹⁹ and

¹⁵*In Re: Resolution Regarding the Proposed Rulemaking to Establish Integrated Resource Planning Components and Reporting Requirements for Entergy New Orleans, Inc.*, 2015 Integrated Resource Plan, Docket No. UD-08-02, at 75 (Feb. 1, 2016) ("2015 Final IRP"); Rebuttal Testimony and Exhibits of Charles Rice, Jr., Docket No. UD-16-02, at 8:4-9 (Nov. 30, 2017) ("Rice-4")

¹⁶ Resolution No. R-14-224 at 16 (June 5, 2014).

¹⁷ Resolution No. R-14-224; Rebuttal Testimony and Exhibits of Seth Cureington, Docket No. UD-16-02, at 79:13-17 (Nov. 30, 2017) ("Cureington-7").

¹⁸ Resolution No. R-17-100 at 5-8 (Feb. 23, 2017).

¹⁹ See Resolution No. R-14-224 at 16. See also, discussion in Cureington-7 at 81 nn.111-114.

WHEREAS, the Council subsequently took further steps to allow for participation by additional intervenors.²⁰ With Resolution No. R-14-364, many other parties were allowed to intervene in the 2015 Final IRP proceeding. Among the parties who intervened in that proceeding were Air Products and Chemicals, Inc. (“Air Products”), the Alliance for Affordable Energy (“Alliance”), the Sierra Club Environmental Law Program (“Sierra Club”) and Posigen of Louisiana, LLC (“Posigen”), and at least nine other entities and organizations;²¹ and

WHEREAS, ENO issued 30 days’ notice of each technical conference and made materials available to the public. These meetings were held in central locations in the City, including a public technical conference in New Orleans East regarding the 2015 Final IRP in May of 2016.²² ENO held more technical conferences than the minimum required by the Council.²³ In response to feedback it received on the draft IRP plan, ENO took steps to increase transparency of the process and to incorporate stakeholder input.²⁴ ENO created a Stakeholder Input Case to supplement the 2015 Final IRP.²⁵ The Council also directed ENO to hold a technical conference and provide the opportunity for public review and comment on the 2015 Final IRP,²⁶ and a public hearing was held;²⁷ and

WHEREAS, the preferred portfolio selected by ENO in its 2015 Final IRP process included a 250 MW combustion turbine (“CT”) unit, but the IRP was not a formal proposal to construct the New Orleans Power Station (“NOPS”).²⁸ By the time the Council’s final order regarding the 2015 Final IRP was issued, ENO’s Initial Application to construct NOPS had

²⁰ See Resolution No. R-14-364 at 7-8 (Sept. 4, 2014). See also Cureington-7 at 81 n.110.

²¹ Cureington-7 at 81. See also, Resolution No. R-14-364 at 8, Resolution No. R-16-104 at 7 (Apr. 7, 2016).

²² Cureington-7 at 82:1-13 and nn.115-117.

²³ Cureington-7 at 82:14-83:3.

²⁴ Cureington-7 at 83:10-14.

²⁵ Cureington-7 at 83:14-18.

²⁶ Resolution No. R-16-104 at 6-8.

²⁷ Resolution No. R-16-104 at 8.

²⁸ Cureington-7 at 79:23.

already been filed. The Council in its resolution accepting the IRP was extremely clear that its acceptance of the IRP did not, in any way, constitute approval of ENO's NOPS application:

1. All issues related to ENO's NOPS CT proposal should be fully vetted in Council Docket No. UD-16-02 including, but not limited to the need for a CT, size, timing, environmental concerns, social justice, cost, transmission, and reliability considerations. **ACCEPTANCE OF THIS IRP SHALL HAVE NO PRECEDENTIAL EFFECT WITH RESPECT TO THE COUNCIL'S EVALUATION OF ENO'S NOPS CT APPLICATION IN COUNCIL DOCKET UD-16-02.**²⁹

WHEREAS, in light of the analysis performed in the 2015 Final IRP proceeding, ENO filed an application before the Council for the proposed NOPS that for the first time proposed a specific technology and location for the CT plan contemplated in the 2015 Final IRP analysis; and

WHEREAS, in Council Resolution No. R-15-599,³⁰ the Council found that it would be reasonable in the development of subsequent Energy Smart Program Years (Program Year 7 and beyond), for the Company to incorporate in its Energy Smart and IRP filings for evaluation by the Advisors, Intervenors, and the Council the goal of increasing the projected savings from the Energy Smart program by 0.2% per year, until such time as the program generates kWh savings at a rate equal to 2% of annual kWh sales ("2% DSM Goal"). The Council also reminded ENO, in Resolution No. R-17-100 that it should include in its Energy Smart filings (Program Year 7 and beyond) and its future IRP filings, for evaluation by the Advisors, Intervenors, and the Council an alternative goal of increasing the projected savings from the Energy Smart program by 0.2% per year, until such time as the program generates kWh savings at a rate equal to 2% of annual kWh sales; and

²⁹ Resolution No. R-17-100.

³⁰ Resolution No. R-15-599 (Dec. 10, 2015).

WHEREAS, ENO has committed to the Council to add 100 MW of renewable resources to its portfolio;³¹ and

NOPS Application

WHEREAS, ENO filed its original proposal to construct NOPS in June 2016;³² and

WHEREAS, the Initial Application outlined ENO's proposal to construct a 226 MW CT generation facility on the Michoud site in New Orleans East. In addition to seeking approval to construct NOPS, ENO seeks approval of a contemporaneous exact cost recovery rider on customer bills, effective beginning with commercial operation of the plant, to recover non-fuel costs; and

WHEREAS, in its Initial Application ENO indicated it was contemplating a long-term service agreement ("LTSA") with the original equipment manufacturer for major maintenance. If such an LTSA is executed, ENO seeks authorization to recover those costs through a fuel adjustment clause ("FAC") mechanism; and

WHEREAS, ENO also seeks approval of its proposed monitoring plan. In the Initial Application, ENO sought approval by January 2017, with the expectation that the CT would be in commercial operation by October 2019. ENO estimated that the cost of the project would be \$216 million. In addition to citing its reliability and capacity need, ENO stated that construction of the project would have a positive impact on the New Orleans and Louisiana economies in terms of new business sales, household earnings and jobs; and

WHEREAS, on November 18, 2016, at the direction of the Council, ENO filed its "Supplemental Testimony of Entergy New Orleans, Inc. for Approval to Construct New Orleans

³¹ Rice-3 at 20:2-10, *see also*, Council Resolution No. R-17-428 at 2.

³² Application of Entergy New Orleans, Inc. for Approval to Construct New Orleans Power Station and Request for Cost Recovery and Timely Relief, Docket No. UD-16-02 (June 20, 2016) ("Initial Application").

Power Station and Request for Cost Recovery and for Timely Relief.” This filing included additional testimony and analysis requested by the Council upon the advice of the Advisors; and

WHEREAS, in January 2017, ENO received an updated forecast of projected customer demand for the 20-year planning horizon. The updated load forecast indicated demand has moderated by an average of 40 MWs per year compared to the forecast used in the Initial Application. On February 14, 2017, after the Intervenors had filed their direct testimony but before the Council’s Advisors filed direct testimony, ENO filed a motion to suspend the procedural schedule to analyze the implications of the updated forecast on its proposed project. ENO also sent an email to its customers explaining that the Company had requested to temporarily suspend the procedural schedule in the docket so that it could evaluate the implications of the updated load forecast. On April 2017, ENO sent an additional email updating customers about ENO’s progress and its investigation into a smaller alternative resource;³³ and

WHEREAS, on July 6, 2017, ENO filed a “Supplemental and Amending Application of Entergy New Orleans, Inc. for Approval to Construct New Orleans Power Station and Request for Cost Recovery and Timely Relief.”³⁴ In this filing, ENO still advocated construction of the 226 MW CT Alternative, but also submitted an alternative proposal to construct a smaller 128 MW “Alternative Peaker” at the Michoud site. The alternative proposal entails construction of seven Wärtsilä 18V50SG Reciprocating Internal Combustion Engine (“RICE”) Generator sets (“RICE Alternative”); and

WHEREAS, ENO explains in its Supplemental Application, in addition to its smaller size, which is more closely matched to ENO’s revised projected capacity need, the RICE

³³ Entergy New Orleans, Inc.’s Motion to Suspend the Current Procedural Schedule Temporarily and to Set Date for Follow-Up Status Conference, Docket No. UD-16-02 (Feb. 14, 2017).

³⁴ Supplemental and Amending Application of Entergy New Orleans, Inc. for Approval to Construct New Orleans Power Station and Request for Cost Recovery and Timely Relief, Docket No. UD-16-02 (July 6, 2017) (“Supplemental Application”).

Alternative has several benefits not offered by the CT. It has on-site black-start capability, lower emissions, uses far less groundwater in its cooling process, and permits greater operational flexibility.³⁵ The anticipated cost of the RICE Alternative is \$210 million, and, if approval had been granted by October 2017, the unit would have been in commercial operation by approximately October 2019;³⁶ and

WHEREAS, in the Supplemental Application, ENO also advised the Council that the expected cost of the CT had increased by \$16 million due to delays. If the Council had approved the CT by the end of October 2017, it would have been operational by approximately November 2020; and

WHEREAS, when ENO filed its Supplemental Application, the Council adopted Resolution No. R-17-426,³⁷ which established a modified procedural schedule to examine the revised proposal. This resolution required ENO to conduct no less than five well-advertised public outreach meetings (one in each Council district) and for its Council Utilities Regulatory Office to conduct one public meeting on ENO's Application in the Council chambers. In total, ENO has held at least 21 public meetings regarding NOPS, including several meetings in New Orleans East.³⁸ Notices for the meetings and handouts provided at the meetings were available in English, Spanish and Vietnamese in order to further participation by affected communities;³⁹ and

WHEREAS, we note that throughout the application process, ENO participated in multiple meetings with community groups, neighborhood associations, and other civic

³⁵ Supplemental Application at 8.

³⁶ Supplemental Application, *citing* Supplemental and Amending Direct Testimony and Exhibits of Charles Rice, Jr., Docket No. UD-16-02, at 12:4-6 (July 6, 2017 ("Rice-3")).

³⁷ Resolution No. R-17-426 (Aug. 10, 2017).

³⁸ Cureington-7 at 87:2-17, 90:1-16; Rice-4 at 17:10-20. Report Regarding Public Outreach Meetings, Docket No. UD-16-02 were filed on Dec. 22, 2016, Aug. 17, 2017, Aug. 23, 2017, Sept. 12, 2017, and Oct. 4, 2017.

³⁹ Cureington-7 at 90:8-10.

organizations to discuss issues surrounding NOPS, including several meetings in New Orleans East.⁴⁰ Council Resolution Nos. R-16-506⁴¹ and R-17-426 provided interested parties and the public at large substantial notice and opportunity to be heard concerning the Company's NOPS proposal, including public outreach meetings in each Council district and two public hearings in Council Chambers; and

WHEREAS, in Resolution No. R-16-506 issued on November 3, 2016 setting the procedural schedule for the consideration of ENO's Initial Application for approval to construct NOPS, the Council clearly articulated its intention to afford meaningful public involvement in the decisional process:

[T]he Council intends to provide the residents of the City of New Orleans with an open and transparent process that will allow for multiple opportunities for the public to communicate its views to ENO and the Council as they relate to the construction of the proposed project....⁴²

Moreover, in that resolution, the Council also required ENO to make a supplemental filing to address certain environmental concerns; created an opportunity for Intervenor to file testimony; required at least two public outreach meetings; provided for a public hearing; and established a mechanism for interested persons to receive email notice of any public meetings or hearings concerning the NOPS application; and

WHEREAS, the following parties intervened in the docket examining the NOPS proposal:

- Alliance for Affordable Energy
- PosiGen
- Air Products
- Deep South Center for Environmental Justice, Inc. ("DSEJ")
- New Orleans Cold Storage & Warehouse Co. Ltd. (NOCS)

⁴⁰ Cureington-7 at 87:11-13.

⁴¹ Resolution No. R-16-506 at 8 (Nov. 3, 2016).

⁴² Resolution No. R-16-506 at 8.

- Gulf States Renewable Energy Industries Association
- Sierra Club
- 350 Louisiana - New Orleans; and

WHEREAS, in addition to the public meetings, parties and intervenors to this proceeding were given the opportunity to file written testimony, conduct extensive discovery, including depositions; and in December 2017, a five-day public evidentiary hearing was held before a Hearing Officer to examine ENO's NOPS application; and

WHEREAS, the Hearing Officer certified the Administrative Record to the Council on January 22, 2018,⁴³ and the matter is now before the Council for its consideration; and

Issues Before the Council

WHEREAS, the Council reviews such applications to determine whether or not the utility's proposal is in the public interest. The public interest standard is designed to "assure the furnishing of adequate service to all public utility patrons at the lowest reasonable rates consistent with the interest both of the public and of the utilities."⁴⁴ Determining whether a proposal is in the public interest requires the Council to balance all relevant factors, no single element of the public interest should be considered in isolation; and

WHEREAS, in Resolution No. R-17-426, the Council required the parties to submit a Joint Statement of Issues after all testimony had been submitted to the Council setting forth the issues that have been raised in the case for the Council's consideration; and

⁴³ Transmittal Letter to Council with Order Certifying Record from Judge Jeffrey S. Gulin, Docket No. UD-16-02 (Jan. 22, 2018).

⁴⁴ *City of Plaquemine v. Louisiana Pub. Serv. Comm'n*, 282 So. 2d 440, 443 (La. 1973). In that case, the court writes: "The entire regulatory scheme, including increases as well as decreases in rates, is indeed in the public interest, designed to assure the furnishing of adequate service to all public utility patrons at the lowest reasonable rates consistent with the interest both of the public and of the utilities. Thus the public interest necessity in utility regulation is not offended, but rather served by reasonable and proper rate increases notwithstanding that an immediate and incidental effect of any increase is improvement in the economic condition of the regulated utility company." *Id.* at 442-443.

WHEREAS, the Council received over 2,700 pages of testimony and exhibits regarding the NOPS applications; and

WHEREAS, after all testimony and exhibits were filed with the Council, on December 1, 2017, ENO, the Advisors, the Alliance, Sierra Club, DSCEJ, 350 Louisiana-New Orleans, and Air Products together submitted a Joint Statement of Issues noting that there are no uncontested issues in the case and setting forth the following contested issues for the Council's consideration as the Council deliberates on whether the NOPS proposals are in the public interest:

- I. Whether ENO's analysis of need is sufficient to justify an investment
 - A. Whether ENO has demonstrated a capacity need
 - B. Whether ENO has demonstrated a reliability need
- II. Whether either of ENO's choices of technology(ies) is in the public interest
 - A. Whether ENO's selection of a CT unit is in the public interest
 - B. Whether ENO's selection of a RICE unit is in the public interest
 - C. Whether ENO appropriately considered a full range of options to meet the identified need
- III. Whether ENO's selection of the Michoud site is reasonable
- IV. Whether ENO's proposed costs, cost recovery mechanism and Monitoring Plan are just and reasonable and should be approved by the Council;⁴⁵ and

WHEREAS, post-hearing briefs addressing these issues were filed by ENO, Air Products, NOCS, a coalition of the Alliance, DSCEJ, and 350-New Orleans, and Sierra Club ("Joint Intervenors"), and the Advisors; and

WHEREAS, ENO urges the Council to approve its Supplemental Application and certify construction of either the CT Alternative or the RICE Alternative and approve a cost recovery

⁴⁵ In Re: Application of Entergy New Orleans, Inc. for Approval to Construct New Orleans Power Station and Request for Cost Recovery and Timely Relief, Joint Statement of Issues, at 1-2 (Docket No. UD-16-02) (Dec. 1, 2017).

mechanism that provides ENO a full and fair opportunity to recover prudently incurred costs on a timely/in-service basis;⁴⁶ and

WHEREAS, ENO argues that (1) it has a long-term need for peaking capacity, which NOPS will provide; (2) it has had a current and persisting reliability need since the deactivations of Michoud Units 2 and 3; (3) in its long-term planning process, ENO considered a full range of options to meet its capacity and reliability needs, and the proposed NOPS units are the appropriate choices to meet those needs; (4) the Michoud site is the ideal location to construct NOPS; and (5) the proposed costs of the NOPS units are reasonable and necessary to address ENO's capacity and reliability needs, and ENO's proposed cost recovery mechanism and monitoring plan are likewise reasonable and necessary to secure the benefits of local generation for ENO's customers;⁴⁷ and

WHEREAS, Air Products states that (1) ENO has demonstrated a need for capacity, both from the perspective of achieving a reasonable reserve margin above its expected peak load, and also from a locational reliability perspective; (2) the CT Alternative is too large and too inflexible to meet the needs of ENO's customers and that the RICE Alternative is in the public interest; but that not all seven of the Wärtsilä units should be constructed at this time; (3) it is not aware of any viable site for construction of NOPS other than the Michoud site, and supports construction of the RICE facility at that location; and (4) as a means of cost recovery it supports the Advisors' proposed two-step rate increase that would be developed in conjunction with the 2018 Combined Rate Case filing, with the first step being to exclude the revenue requirement associated with NOPS while the second step would recognize a higher level of rates that would

⁴⁶ Post-Hearing Brief of Entergy New Orleans, LLC, Docket No. UD-16-02, at 156 (Jan. 19, 2018) ("ENO Post-Hearing Brief").

⁴⁷ ENO Post-Hearing Brief at 4-5.

become effective following the commercial operation date (“COD”) of the NOPS unit.⁴⁸ Air Products objects to the cost recovery rider, as proposed by ENO, but states that if such a rider is the Council’s preferred approach, it supports the recommendation of the Advisors that if this route is taken, the allocation to customer classes be as an equal percentage of base rate revenues.⁴⁹ Air Products also argues that it is being overcharged by the existing Purchased Power Capacity Acquisition Cost Recovery (“PPCACR”) Rider because that rider allocates the non-fuel revenue requirements on a customer class kilowatt hour (“kWh”) basis, which is not cost-based, Air Products requests that the Council order the realignment of PPCACR Rider recoveries across customer classes as an equal percent of base rate revenues.⁵⁰ Air Products requests that if this is not possible, that it be compensated for the overcharges in the 2018 Combined Rate Case.⁵¹ Air Products also supports the position of the Advisors on the monitoring plan,⁵² and

WHEREAS, NOCS argues that (1) ENO fell far short of meeting its burden of proving a capacity need for the 226 MW CT Alternative; (2) it is dubious whether ENO’s evidence of a 99 MW capacity shortfall surfacing in 10 years is sufficient to justify the 128 MW RICE Alternative; (3) the evidence reveals a transmission-related reliability problem, not a generation-related reliability problem; (4) the record does not contain an analysis of whether the St. Charles Power Station could have provided sufficient reliability benefits to address ENO’s needs; (5) the selection of the CT Alternative is not in the public interest, and even ENO’s own analyses of the optimal mix of generating resource technologies to fill its purported need indicates that

⁴⁸ Brief of Air Products and Chemicals, Inc., Docket No. UD-16-02, at 3-4 (Jan. 19, 2018) (“Air Products Post-Hearing Brief”).

⁴⁹ Air Products Post-Hearing Brief at 4.

⁵⁰ Air Products Post-Hearing Brief at 4.

⁵¹ Air Products Post-Hearing Brief at 4.

⁵² Air Products Post-Hearing Brief at 4.

combined cycle gas turbine (“CCGT”) technology is the preferred resource solution; (6) the selection of the RICE Alternative suffers from the same arbitrary, unsupported foundation as the selection of the CT Alternative, thus, ENO has not shown that the RICE Alternative is in the public interest; (7) ENO’s refusal to conduct a Request for Proposal (“RFP”) process to solicit offers from third parties that could have been less expensive than the NOPS project, denied the City Council the ability to compare the NOPS project to alternative resources or a mix of resources that could serve the same supply role, on a total production cost basis, and undermines ENO’s ability to prove either version of the NOPS project is the least cost option for the citizens of New Orleans; (8) ENO neglected to consider the full range of options to meet any identified need because it did not use an RFP; (9) the City Council should initiate a rulemaking to develop RFP rules; and (10) ENO further neglected to consider the full range of options to meet any identified need because it did not fully analyze a transmission solution;⁵³ and

WHEREAS, the Joint Intervenors argue that ENO has provided the Council with a series of shifting and illusory claims about the need for a gas plant.⁵⁴ The Joint Intervenors argue that the driving purpose behind the inconsistencies in ENO’s case is its desire to build, and add to its rate base, a \$200-plus million gas-fired facility and that its desire for a new gas plant has resulted in its failure to seriously evaluate any alternative other than a gas plant to meet the City’s capacity or reliability needs.⁵⁵ The Joint Intervenors take issue with ENO’s decision to deactivate Michoud Units 2 and 3 and its failure to inform the Council in a timely fashion of the reliability impacts of doing so.⁵⁶ They argue that a study conducted by the Midcontinent

⁵³ Post-Hearing Brief of New Orleans Cold Storage & Warehouse Co. Ltd., Docket No. UD-16-02, at 1 (Jan. 19, 2018) (“NOCS Post-Hearing Brief”).

⁵⁴ Post-Hearing Brief of Alliance for Affordable Energy, Deep South Center for Environmental Justice, Inc., 350-New Orleans, and Sierra Club, Docket No. UD-16-02, at 3 (Jan. 19, 2018) (“Joint Intervenors’ Post-Hearing Brief”).

⁵⁵ Joint Intervenors’ Post-Hearing Brief at 3-4.

⁵⁶ Joint Intervenors’ Post-Hearing Brief at 4.

Independent System Operator, Inc. (“MISO”) in 2014 proves that there are no reliability concerns posed by the plan to retire Michoud Units 2 and 3.⁵⁷ The Joint Intervenors detail the history of ENO’s retirement of the Michoud Units 2 and 3 and its proposal to build NOPS and conclude that ENO has tried to convince the Council there is no option other than to build the NOPS unit.⁵⁸ The Joint Intervenors argue that due to the declining load forecast, ENO cannot justify a gas plant as big as the CT Alternative.⁵⁹ The Joint Intervenors argue that ENO changed its argument, and is now relying upon a reliability need rather than a capacity need to justify a gas plant, and that ENO has now added arguments that a gas plant would assist in storm recovery and might be able to assist in backing up Sewerage & Water Board of New Orleans (“S&WB”), though ENO has not done sufficient modeling to support either claim;⁶⁰ and

WHEREAS, the Joint Intervenors argue that regardless of their assertions that (1) the gas plant costs more than the alternatives studied, (2) ENO never fully evaluated the transmission-upgrades solution, (3) it would create a very large and risky capacity surplus for the City, (4) the gas plants would create significant health and flood risks for New Orleans East communities, and (5) the units would contribute to air and climate pollution, ENO still maintains that the Council must immediately approve NOPS for purported reliability reasons.⁶¹ The Joint Intervenors argue that none of ENO’s claimed reasons for building the gas plant, whether the original capacity arguments or the new reliability arguments, justify the project and that ENO has failed to study cheaper, faster, and less polluting means to resolve the reliability issues the City faces, and the Council should reject ENO’s application;⁶² and

⁵⁷ Joint Intervenors’ Post-Hearing Brief at 4.

⁵⁸ Joint Intervenors’ Post-Hearing Brief at 3-6.

⁵⁹ Joint Intervenors’ Post-Hearing Brief at 7.

⁶⁰ Joint Intervenors’ Post-Hearing Brief at 7-9.

⁶¹ Joint Intervenors’ Post-Hearing Brief at 9.

⁶² Joint Intervenors’ Post-Hearing Brief at 9-10.

WHEREAS, the Advisors, having reviewed the evidence presented in this case and performed their own, independent analyses, conclude that ENO's customers are presently at serious and unacceptable risk of significant electrical outages of potentially long duration and such risk will persist until some form of reliable, fast-start generation is obtained locally.⁶³ The Advisors believe only two of the options presented to the Council could address the identified reliability and capacity needs -- the option to build a CT Alternative or the option to build the RICE Alternative.⁶⁴ The Advisors do not believe that the third option -- to reject both proposals and instead rely upon ENO's ability to perform transmission upgrades to mitigate the reliability concern and meet the capacity need with a combination of demand-side management ("DSM"), distributed generation ("DG") and renewable resources (the "Transmission Alternative") is a realistic, reliable, or prudent method of addressing the identified concerns;⁶⁵ and

WHEREAS, the Advisors argue that the RICE Alternative has many advantages over both the CT Alternative and the Transmission Alternative: (1) because of its smaller size, the RICE Alternative more closely fits ENO's need; (2) it would use 95% less groundwater than the CT Alternative and would represent a 99.9% reduction in groundwater usage compared to the deactivated Michoud units previously operating at that site; and (3) it has black-start capability, and would provide a local resource for ENO to respond to storm events and other types of outages;⁶⁶ and

WHEREAS, the Advisors believe that the CT Alternative is too big and that the Transmission Alternative is likely to be difficult-to-impossible to effectively implement in the time frame needed and puts all of ENO's eggs into one basket by leaving the City 100%

⁶³ Post-Hearing Brief of the Advisors to the City Council of New Orleans, Docket No. UD-16-02, at 1 (Jan. 19, 2018) ("Advisors' Post-Hearing Brief").

⁶⁴ Advisors' Post-Hearing Brief at 1.

⁶⁵ Advisors' Post-Hearing Brief at 1.

⁶⁶ Advisors' Post-Hearing Brief at 1-2.

dependent upon the repair of transmission facilities to restore power after a blackout, which can take days or even weeks to accomplish;⁶⁷ and

WHEREAS, the Advisors believe that the issues raised with respect to environmental hazards, flooding, and subsidence should be fully addressed by conditioning the Council's approval upon compliance with all applicable federal, state, and local laws and recommend that the Council should specifically require ENO to demonstrate such compliance by filing copies of all permits obtained and any other rulings by any agency with authority over the project;⁶⁸ and

WHEREAS, the Advisors argue that the RICE Alternative is a proven technology that many regulators are turning to in order to support the transition to renewables and ensure reliability, and that quick-starting units such as the RICE units selected for the project are needed to complement the technical advantages of existing units not only to ensure reliable power to customers, but to enable the integration of more cost-effective variable renewable generation;⁶⁹ and

WHEREAS, the Advisors state that locating the plant at the Michoud site is a reasonable choice by the utility, and the physical requirements of the system are best served by placing a facility within a specific geographic location, within which, the Michoud site is the best suited to meet the needs of the community for several reasons.⁷⁰ The Advisors also note that evidence in the record indicates that the environmental impact on New Orleans East will be significantly reduced compared to the impact of the plants previously operating at Michoud, and will remain within the limits set by the Environmental Protection Agency ("EPA") and the Louisiana

⁶⁷ Advisors' Post-Hearing Brief at 2. The Advisors note that recent news reports indicate that MISO asked utilities in MISO South to encourage their customers to reduce usage to due to a potential shortage of capacity during a recent weather event. See <http://www.fox8live.com/story/37291783/entergy-customers-free-to-use-power-as-normal> and https://www.livingstonparishnews.com/entergy-asks-louisiana-customers-to-reduce-electricity-today-or-face/article_d2233344-fc16-11e7-a0fa-4b9f1ae12321.html.

⁶⁸ Advisors' Post-Hearing Brief at 3.

⁶⁹ Advisors' Post-Hearing Brief at 4-5, *citing* to recent decisions in Michigan and Hawaii to approve RICE units.

⁷⁰ Advisors' Post-Hearing Brief at 5-6.

Department of Environmental Quality (“LDEQ”).⁷¹ Thus, the Advisors believe there will be no disproportionate, significant adverse effect on residents of New Orleans East, and that there will be significant benefits to them in terms of both electric reliability and economics.⁷² Without the plant, the Advisors believe there is substantial risk that multiple minority neighborhoods would be at a serious and unacceptable risk of outages;⁷³ and

WHEREAS, the Advisors also argue that the Council’s process has provided sufficient opportunity for public input regarding the plant; and that the matter is sufficiently ripe for Council decision;⁷⁴ and

I. Whether ENO’s analysis of need is sufficient to justify an investment

WHEREAS, ENO argues that it has both a long-term need for peaking capacity and that it has had a current and persisting reliability need since the deactivations of Michoud Units 2 and 3;⁷⁵ and

A. Whether ENO has demonstrated a capacity need

WHEREAS, ENO argues that the evidence confirms that ENO has an overall need for long-term capacity, a substantial need for long-term peaking and reserve capacity, as well as unique planning needs in New Orleans that justify construction of NOPS;⁷⁶ and

WHEREAS, ENO projects an overall need of approximately 99 MW of capacity by 2026, which grows to approximately 248 MW by 2036, the end of the 20-year planning horizon.⁷⁷ ENO further states that its current forecast indicates a persistent peaking and reserve

⁷¹ Advisors’ Post-Hearing Brief at 6.

⁷² Advisors’ Post-Hearing Brief at 6.

⁷³ Advisors’ Post-Hearing Brief at 6.

⁷⁴ Advisors’ Post-Hearing Brief at 6-7.

⁷⁵ ENO Post-Hearing Brief at 4-5.

⁷⁶ ENO Post-Hearing Brief at 7.

⁷⁷ ENO Post-Hearing Brief at 8; Supplemental and Amending Direct Testimony and Exhibits of Seth Cureington, Docket No. UD-16-02, at 7, Ex. SEC-11(July 6, 2017) (HSPM) (“Cureington-6”).

deficit of approximately 342 MW on average in each year of the 20-year planning horizon.⁷⁸ ENO has submitted evidence, including its load forecast and other analyses, to the Council in support of this assertion;⁷⁹ and

WHEREAS, Air Products states that after reviewing the evidence, especially the Supplemental and Amending Direct Testimony of ENO's witness Cureington filed in July of 2017, Air Products concluded that there is a capacity deficit on the ENO system, and a need to install additional capacity. Air Products explains that the specific details supporting this conclusion are set forth in Cureington's Exhibit SEC-11, and that it is clear from a review of this load and capacity statement that unless additional capacity is added to the ENO system, ENO will have a large and persistent deficit and would not be able to meet its customers' needs;⁸⁰ and

WHEREAS, Air Products states that its witness, Mr. Brubaker, noted that ENO's updated studies indicate a long-term capacity need of approximately 99 MW by 2026, and up to 248 MW by 2036, but that the 2036 data is a forecast almost 20 years into the future, and it is very possible that the load will not grow as much as projected or that anticipated retirements of power plants in Amite South will be delayed, or both, resulting in less need for capacity than asserted by ENO;⁸¹ and

WHEREAS, Air Products explains that it supports adding some capacity, but it does not believe that the evidence justifies adding the 226 MW unit because there is not a near-term need for this amount of capacity.⁸² Air Products argues that the evidence shows that it is obvious that adding the 226 MW CT Alternative would create a significant excess capacity for a prolonged

⁷⁸ ENO Post-Hearing Brief at 8; Cureington-6 at 7, Ex. SEC-11.

⁷⁹ Cureington-6 at 7, Ex. SEC-11.

⁸⁰ Air Products Post-Hearing Brief at 5.

⁸¹ Air Products Post-Hearing Brief at 5, *citing* Additional Direct Testimony and Exhibits of Maurice Brubaker, Docket No.UD-16-02, at 6:2-6 (Oct. 16, 2017) ("Brubaker-2").

⁸² Air Products Post-Hearing Brief at 5.

period of time and that it is not a suitable addition as reserve margins would increase significantly above the 12% target.⁸³ Air Products argues that because of the large amount of excess capacity it would create, the CT Alternative may not be considered used and useful by the City Council.⁸⁴ Air Products' witness Mr. Brubaker testified that, in light of the long time before an indicated capacity need would approach 226 MW, a smaller amount of capacity added now will cover needs in the near future, provide time to evaluate how loads actually materialize, and allow stakeholders to monitor the need for and timing of unit retirements.⁸⁵ He also testified that the smaller revenue requirement associated with a smaller capacity addition will also reduce risk and create less of an impact on customers;⁸⁶ and

WHEREAS, Air Products also argues that the evidence shows that adding the 128 MW RICE unit yields excess capacity as well, but not to the same extent as would be true if the CT unit were added, and that the RICE Alternative, therefore, is a more appropriate fit for the needs of ENO's customers at this point in time;⁸⁷ and

WHEREAS, Air Products states that while it supports construction of a RICE facility, it strongly encourages the Council not to approve initial construction of all seven of the 18 MW Wäertsilä units because the evidence clearly indicates that not all of that capacity is needed initially, and may not ever be needed.⁸⁸ Air Products recommends building out the infrastructure to accommodate all seven units (in case all seven ultimately are needed), but installing only four or five of the units now and deferring the decision to add other units until a later point in time

⁸³ Air Products Post-Hearing Brief at 5-6, *citing* Excerpt of Ex. SEC-11 with handwritten notation of Peaker 226 MW (HSPM) ("AP-2").

⁸⁴ Air Products Post-Hearing Brief at 6.

⁸⁵ Air Products Post-Hearing Brief at 6, *quoting* Brubaker-2 at 6:10-18.

⁸⁶ Air Products Post-Hearing Brief at 6, *quoting* Brubaker-2 at 6:10-18.

⁸⁷ Air Products Post-Hearing Brief at 6-7, *citing* Cureington-6, Ex. SEC-11, Brubaker-2 at 8:6-13, Direct Testimony and Exhibits of Joseph Rogers, Docket No. UD-16-02, at 3:10-15 (Nov. 20, 2017) ("Rogers-1").

⁸⁸ Air Products Post-Hearing Brief at 9.

when they may be justified.⁸⁹ Air Products argues that this will reduce the amount of capital outlay and cost impact on customers and also provide time to learn how energy efficiency measures and general demographic and economic conditions actually will impact ENO's load growth.⁹⁰ Air Products argues that it is very possible that if energy efficiency and demand response efforts are successful under the Energy Smart program, that load growth will be less than currently forecasted by ENO, and that ENO's recent history of forecasts have demonstrated lower load forecasts each time a forecast is made;⁹¹ and

WHEREAS, Air Products argues that the evidence shows that fewer RICE units would be more than sufficient to meet the anticipated needs for the first few years.⁹² Air Products does not find ENO's argument that it would be a lower average cost per kW if all seven units are built at once to be persuasive, arguing instead that it is uncertain that the additional units will ever be needed, and therefore, it does not make sense to make a larger upfront dollar outlay when New Orleans may never use the full capacity;⁹³ and

WHEREAS, NOCS argues that ENO's showing falls far short of establishing a need for 226 MW of CT capacity, and is dubious with regard to whether ENO needs 128 MW of RICE capacity.⁹⁴ NOCS notes that ENO's projected need decreased between its Initial Application and its Supplemental and Amending Application and that even under the most aggressive assumptions, ENO does not have a need for over 200 MW of capacity until at least 2036, 20 years into the future.⁹⁵ NOCS notes that the further you go into the future, the less certain a

⁸⁹ Air Products Post-Hearing Brief at 9.

⁹⁰ Air Products Post-Hearing Brief at 9.

⁹¹ Air Products Post-Hearing Brief at 9.

⁹² Air Products Post-Hearing Brief at 9, *citing* to Hr'g Tr. 12/18/17, 330:7-331:19.

⁹³ Air Products Post-Hearing Brief at 10.

⁹⁴ NOCS Post-Hearing Brief at 4.

⁹⁵ NOCS Post-Hearing Brief at 4.

forecast is and that, while forecasts can err on the high side as well as the low side, the established trend has shown load growth declining, not increasing;⁹⁶ and

WHEREAS, NOCS argues that the evidence shows that ENO's load forecast is likely overestimated and that the 2% DSM Goal, if achieved, and ENO's commitment to add 100 MW of renewables to its portfolio, if realized, could wipe out the entirety of the 99 MW shortfall expected by 2026.⁹⁷ NOCS argues that the evidence supporting ENO's 99 MW capacity need is, therefore, weak at best;⁹⁸ and

WHEREAS, the Joint Intervenors argue that ENO has failed to establish that it will have a capacity need for a \$200 million gas plant at any point in the next 10 years.⁹⁹ They argue that there is no capacity need to build a \$200-plus million gas plant, and that the evidence shows that even with the City's continued economic and population growth ENO's system is actually moving toward a capacity surplus without the gas plant.¹⁰⁰ The Joint Intervenors argue that the evidence shows that without building either gas plant proposed, by 2026, ENO will likely have a capacity surplus, assuming that it installs 100 MW of solar capacity and achieves savings consistent with the Council's 2% DSM Goal, and that this will be an even greater surplus if New Orleanians continue to install new residential or commercial solar at existing rates, rather than halting new installations in 2020 as ENO unreasonably assumes;¹⁰¹ and

WHEREAS, the Joint Intervenors argue that building the RICE units would raise the capacity surplus and ENO customers would bear the full risk of paying for that extra capacity.¹⁰²

The Joint Intervenors argue that New Orleans has the time to focus on studying a more cost-

⁹⁶ NOCS Post-Hearing Brief at 6.

⁹⁷ NOCS Post-Hearing Brief at 6-7.

⁹⁸ NOCS Post-Hearing Brief at 8.

⁹⁹ Joint Intervenors' Post-Hearing Brief at 10.

¹⁰⁰ Joint Intervenors' Post-Hearing Brief at 10.

¹⁰¹ Joint Intervenors' Post-Hearing Brief at 11-12.

¹⁰² Joint Intervenors' Post-Hearing Brief at 12.

efficient set of progressive alternatives, potentially including further DSM, renewable energy and bulk battery storage, and, as necessary, purchases on the MISO capacity market, to maintain resource adequacy across the long term.¹⁰³ They argue that making a massive, \$200-plus million investment based on claimed shortfalls at the end of a 20-year period is particularly risky and would be unnecessary, as the Council would have well over a decade in which to evaluate the least-cost alternatives to meet any lingering, long-term need;¹⁰⁴ and

WHEREAS, the Joint Intervenors urge that, to the extent that ENO argues that there is a foreseeable capacity need for a gas plant, ENO is relying on misleading assumptions or suggesting it will not meet the Council’s energy efficiency goals.¹⁰⁵ The Joint Intervenors argue that the Council should only consider ENO’s overall capacity need, and not its claim of a greater peaking and reserve deficit, which the Joint Intervenors allege is “merely a slight of hand to create the impression of a need;”¹⁰⁶ and

WHEREAS, the Joint Intervenors argue that ENO’s concern that the capacity it owns could retire sooner than forecast, thereby reducing any capacity surplus, is speculative and redundant in that ENO already projected retirement dates for its resources in its reference load forecast, and the total amount that could retire early is less than the size of the RICE Alternative;¹⁰⁷ and

WHEREAS, the Joint Intervenors argue that ENO’s load forecast is misleading because it fails to account for any peak demand savings from new energy efficiency programs approved

¹⁰³ Joint Intervenors’ Post-Hearing Brief at 12.

¹⁰⁴ Joint Intervenors’ Post-Hearing Brief at 13.

¹⁰⁵ Joint Intervenors’ Post-Hearing Brief at 12.

¹⁰⁶ Joint Intervenors’ Post-Hearing Brief at 14.

¹⁰⁷ Joint Intervenors’ Post-Hearing Brief at 14.

by the Council after 2016, specifically the goals approved for Energy Smart Program Years 7-9, which would double the savings;¹⁰⁸ and

WHEREAS, the Joint Intervenors argue that ENO's position that the Council's goals are not "cost effective or achievable" is a misguided and inappropriate attempt to re-litigate the Council's recent energy efficiency proceeding, and that its extreme skepticism is contrary to the evidence of its own experts and the City's Climate Action Plan.¹⁰⁹ The Joint Intervenors also take issue with ENO's projection that ENO customers will no longer install new rooftop solar panel systems after 2020 and goes against the trend of declining prices;¹¹⁰ and

WHEREAS, the Joint Intervenors encourage the Council to examine the ENO 2018 load forecast that is expected to be released soon before accepting ENO's assertions that extra capacity is needed;¹¹¹ and

WHEREAS, the Joint Intervenors argue that rather than building a gas plant, ENO should meet any shortfall more cheaply with smaller resources, further investments in renewable energy or bulk battery storage, or with MISO capacity market purchases;¹¹² and

WHEREAS, the Joint Intervenors also argue that building either gas plant will expose New Orleans residents and businesses to significant financial risk and could limit the options to invest in renewables or energy efficiency.¹¹³ They argue that the evidence shows that in the

¹⁰⁸ Joint Intervenors' Post-Hearing Brief at 15.

¹⁰⁹ Joint Intervenors' Post-Hearing Brief at 15.

¹¹⁰ Joint Intervenors' Post-Hearing Brief at 16-17.

¹¹¹ Joint Intervenors' Post-Hearing Brief at 17. The Council notes that in making this argument the Joint Intervenors are urging it to rely upon evidence outside the record that other parties have had neither the opportunity to review or conduct cross-examination on. The Council will not take into account evidence which is not properly in the record of this case in rendering its decision.

¹¹² Joint Intervenors' Post-Hearing Brief at 18.

¹¹³ Joint Intervenors' Post-Hearing Brief at 18.

most likely scenarios, the ratepayer will pay significantly more than ENO claims for the surplus capacity created by a gas plant;¹¹⁴ and

WHEREAS, the Joint Intervenors argue that ENO's projections of MISO capacity market prices approaching the cost of new entry ("CONE") are not supported by historical trends or market fundamentals that further point to prices staying low due to capacity surpluses in MISO.¹¹⁵ The Joint Intervenors argue that if capacity prices remain low, New Orleans residents and businesses will pay more than ENO has projected for excess capacity, and this risk is most pronounced with the CT Alternative, though the RICE Alternative also presents a troubling level of capacity market risk;¹¹⁶ and

WHEREAS, the Joint Intervenors argue that the potential for New Orleans ratepayers to over-pay for capacity poses a real social justice concern, given the energy burden borne by low-income customers;¹¹⁷ and

WHEREAS, the Joint Intervenors also argue that another risk in overbuilding gas capacity is that doing so will reduce the incentive to invest instead in new sources of renewable energy and DSM.¹¹⁸ They argue that ENO's witness Charles Rice stated that ENO's witness Charles Long specified that if ENO builds the RICE units, there would not be a foreseeable need for additional generation such as renewables, in ENO's system;¹¹⁹ and

WHEREAS, the Advisors, after reviewing the evidence and performing their own analysis, reached the conclusion that there is a capacity need that ENO needs to fill, and that it is of sufficient size to warrant an investment in long-term capacity rather than relying upon short-

¹¹⁴ Joint Intervenors' Post-Hearing Brief at 18.

¹¹⁵ Joint Intervenors' Post-Hearing Brief at 19-20.

¹¹⁶ Joint Intervenors' Post-Hearing Brief at 21.

¹¹⁷ Joint Intervenors' Post-Hearing Brief at 21.

¹¹⁸ Joint Intervenors' Post-Hearing Brief at 22.

¹¹⁹ Joint Intervenors' Post-Hearing Brief at 22.

term capacity acquisitions, even though the Advisors do concur that ENO has overestimated its capacity need;¹²⁰ and

WHEREAS, the Advisors do not dispute the underlying methodology of ENO's load forecast, and the Advisors do not find it unusual that a load forecast would fluctuate over time.¹²¹ The Advisors explain that the nature of a load forecast is to predict the future; there will always be some over- or under-estimation, simply because no one can predict the future with great precision (especially where consumption is partially dependent upon future weather conditions).¹²² The Advisors explain that the goal is to make a prediction based on known data and reasonable assumptions that can reasonably be used for planning purposes;¹²³ and

WHEREAS, the Advisors nevertheless observe that the revised load forecasts illustrate a general downward trend in expectations of how load will grow over time.¹²⁴ Although ENO argues that there is still a need sufficient to justify its 226 MW CT Alternative,¹²⁵ the Advisors believe that the significant reduction in projected total load requirements since the 2015 Final IRP, where a 250 MW CT to come online in 2019 was selected as part of the preferred portfolio, would strongly suggest that the 226 MW CT Alternative may be greater than the optimal size for the proposed peaking plant on a capacity need basis;¹²⁶ and

WHEREAS, the Advisors note that Joint Intervenors' witness Dr. Stanton argues that properly accounting for ENO's own planned solar investments reduces ENO's claimed capacity

¹²⁰ Advisors' Post-Hearing Brief at 18-19.

¹²¹ Advisors' Post-Hearing Brief at 19-20.

¹²² Advisors' Post-Hearing Brief at 19-20.

¹²³ Advisors' Post-Hearing Brief at 18-19.

¹²⁴ Advisors' Post-Hearing Brief at 22, *citing* Supplemental and Amending Direct Testimony and Exhibits of Seth Cureington, Docket No. UD-16-02, at 7:3-6 (July 6, 2017) ("Cureington-5"), Rogers-1 at 6:17-7:1, and Direct Testimony and Exhibits of Joseph Rogers, Docket No. UD-16-02, at 7:1-3 (Nov. 20, 2017) (HSPM) ("Rogers-2").

¹²⁵ Cureington-5 at 11:10-12:14.

¹²⁶ Advisors' Post-Hearing Brief at 22, *citing* Rogers-1 at 9:3-6.

deficit from 99 MW in 2026 to 49 MW.¹²⁷ The Advisors explain that Dr. Stanton bases this conclusion on ENO's announcement that it is planning to procure 100 MW of utility-scale solar resources that will come online in 2020 and half of which MISO credits toward capacity, which she believes would result in a 50 MW reduction in ENO's capacity need.¹²⁸ However, the Advisors note that upon cross-examination, Dr. Stanton admitted that she does not know the location of any of the potential 100 MW of renewables;¹²⁹ and

WHEREAS, ENO states that while ENO remains committed to adding up to 100 MW of solar, the timing and location of those resources are still uncertain.¹³⁰ ENO argues that NOPS has been identified as the best alternative to meet the Company's long-term overall capacity deficit, including the substantial need for a local peaking and reserve resource that would provide the benefits ENO discusses with respect to NOPS;¹³¹ and

WHEREAS, with respect to the Joint Intervenors' argument that ratepayer investment in rooftop solar is likely to continue to grow in a linear fashion, in cross-examination, Joint Intervenors' witness Dr. Stanton admitted that (1) she had not performed any analysis that supports this trajectory of behind-the-meter solar growth in New Orleans;¹³² (2) that she did not perform an analysis with respect to the duration that behind-the-meter or utility scale battery storage could provide capacity when needed;¹³³ (3) and that she did not perform an analysis of the potential costs of either behind-the-meter solar or utility scale battery storage over the 20-

¹²⁷ Advisors' Post-Hearing Brief at 23, *citing* Direct Testimony and Exhibits of Dr. Elizabeth Stanton, Docket No. UD-16-02, at 6:7-8 (Oct. 16, 2017) ("Stanton-1").

¹²⁸ Advisors' Post-Hearing Brief at 23-24, *citing* Stanton-1 at 11:8-14.

¹²⁹ Advisors' Post-Hearing Brief at 24, *citing In re. Supplemental and Amending Application of Entergy New Orleans, Inc.*, Hearing Transcript, Docket No. UD-16-02 (Dec. 21, 2017), 22:4-15 ("Hr'g Tr. 12/21/17").

¹³⁰ Advisors' Post-Hearing Brief at 24, *citing* Cureington-7 at 49:15-16.

¹³¹ Advisors' Post-Hearing Brief at 24, *citing* Cureington-7 at 49:4-9.

¹³² Advisors' Post-Hearing Brief at 24, *citing* Hr'g Tr. 12/21/17, 24:11-15.

¹³³ Advisors' Post-Hearing Brief at 24, *citing* Hr'g Tr. 12/21/17, 25:17-22.

year planning horizon, and had not analyzed the capacity that either could provide.¹³⁴ Given her lack of analysis to support her projections of behind-the-meter solar growth in New Orleans, the Advisors are not persuaded to rely upon her calculation of how much capacity is likely to be available through behind-the-meter solar;¹³⁵ and

WHEREAS, the Advisors note that, in addition to not incorporating the 2% DSM Goal into its reference case, a review of ENO's calculations indicates that while ENO accounted for the effects of existing DSM programs for Program Year 6 (12 months ended March 2017), it did not incorporate any reductions in the load requirements for future DSM programs.¹³⁶ The Advisors' analysis shows that if the 2% DSM Goal is taken into account in the load forecast, the projected capacity shortfall is lower than ENO forecasts.¹³⁷ The Advisors do find it important, however, that ENO has submitted evidence backed by a study performed by Navigant Consulting, Inc. ("Navigant") that the 2% DSM Goal is not achievable and no party has put evidence into the record that demonstrates that the 2% DSM Goal is achievable. The Advisors believe that it is reasonable, in light of the goal, to expect the kWh savings from DSM to grow beyond the Program Year 6 kWh savings assumed in ENO's reference case, and thus, the Advisors believe that the ultimate capacity need will likely be smaller than what ENO has projected.¹³⁸ Accordingly, the Advisors conclude that a capacity need exists, albeit smaller with consideration of DSM growth, and the Advisors believe that a long-term investment in generation capacity is justified;¹³⁹ and

¹³⁴ Advisors' Post-Hearing Brief at 24-25, *citing* Hr'g Tr. 12/21/17, 24:22-25:16.

¹³⁵ Advisors' Post-Hearing Brief at 25.

¹³⁶ Advisors' Post-Hearing Brief at 27, *citing* Rogers-1 at 10:1-5; Direct Testimony and Exhibits of Victor Prep, Docket No. UD-16-02, at 30:2-5 (Nov. 20, 2017) ("Prep-1").

¹³⁷ Advisors' Post-Hearing Brief at 27, *citing* Rogers-2 at 13:7-11.

¹³⁸ Advisors' Post-Hearing Brief at 27-28.

¹³⁹ Advisors' Post-Hearing Brief at 28.

WHEREAS, the Advisors' analysis demonstrates that ENO has employed inconsistent peak load assumptions between its transmission studies and economic studies when considering the amount of DSM peak load reductions which would occur with the continued implementation of the Council's 2% DSM Goal and the appropriate capacity factor of any potential solar generation.¹⁴⁰ The Advisors explain that such inconsistent assumptions can affect the actual load to be served in the transmission studies in the range of 48.1 MW to 63.1 MW over the period analyzed;¹⁴¹ and

WHEREAS, the Advisors state that, there is significant uncertainty as to by how much ENO's load forecast can reasonably be reduced.¹⁴² The Advisors urge that reliable electric service is a critical need, the consequences of failing to ensure reliable service -- in this case the potential for cascading outages of potentially long duration affecting as many as 49,000 customers -- are likely to be worse than the consequences of investing in slightly too much capacity.¹⁴³ The Advisors recommend the installation of an amount of capacity that allows for a reasonable margin of error, based on the data and information known at this time.¹⁴⁴ The Advisors state that it is generally not possible to match capacity with load requirements precisely, any given utility will be somewhat long or short on capacity in any given year, and using the capacity markets as a short-term fix to true up any such minor imbalances is reasonable.¹⁴⁵ However, capacity market prices are variable, and because of this, the Advisors find that it is prudent to try to match the capacity with the load requirement as closely as is reasonably possible;¹⁴⁶ and

¹⁴⁰ Advisors' Post-Hearing Brief at 28-29, *citing* Vumbaco-1 at 6:12-15.

¹⁴¹ Advisors' Post-Hearing Brief at 29, *citing* Vumbaco-1 at 6:15-17.

¹⁴² Advisors' Post-Hearing Brief at 29.

¹⁴³ Advisors' Post-Hearing Brief at 29.

¹⁴⁴ Advisors' Post-Hearing Brief at 29.

¹⁴⁵ Advisors' Post-Hearing Brief at 29.

¹⁴⁶ Advisors' Post-Hearing Brief at 29, *citing* Rogers-1 at 32:1-8.

WHEREAS, the Advisors conclude that the evidence indicates that ENO has an immediate and future need for capacity and that need is not mitigated even if the Council's 2% DSM Goal is achieved.¹⁴⁷ Further, the Advisors believe that it would not be appropriate to rely on the MISO annual planning resource auction ("PRA") to meet ENO's long-term resource needs.¹⁴⁸ Accordingly, the Advisors believe the capacity need in combination with the reliability need warrants an investment in long-term capacity;¹⁴⁹ and

WHEREAS, ENO asserts that the Joint Intervenors' witnesses propose a number of speculative and unreasonable assumptions intended to erode the Company's capacity estimates and undermine its economic analysis to make the Transmission Alternative look more attractive. ENO argues that they altered reasonable assumptions in order to lower ENO's load and the price of capacity in the MISO market based on pure speculation and without any production cost or capacity expansion modeling and without having reviewed any of the analysis performed in the 2015 Final IRP proceeding;¹⁵⁰ and

WHEREAS, ENO argues that the Joint Intervenors' witnesses' proposed reductions to ENO's peak load forecast are unreasonable.¹⁵¹ ENO argues that if it were to adopt Joint Intervenors hypothetical assumptions and manipulations of the numbers, it could lead to the Company not planning for load that will in fact materialize, "which has a host of negative consequences;¹⁵² and

WHEREAS, ENO points out that both Dr. Stanton and Mr. Fagan admitted at the hearing that they do not have any complaints about the fundamental methodology used by ENO

¹⁴⁷ Advisors' Post-Hearing Brief at 29.

¹⁴⁸ Advisors' Post-Hearing Brief at 29.

¹⁴⁹ Advisors' Post-Hearing Brief at 29.

¹⁵⁰ ENO Post-Hearing Brief at 17-18.

¹⁵¹ ENO Post-Hearing Brief at 19-31.

¹⁵² ENO Post-Hearing Brief at 19.

to forecast its peak load, and that they did not provide any alternative load forecast of their own.¹⁵³ ENO also points out that Mr. Fagan admitted that he has never created a load forecast for resource planning;¹⁵⁴ and

WHEREAS, ENO states that it supports the Council's 2% DSM Goal, but argues that it is extremely aggressive and that no party in this case can guarantee that it will be achieved, and that it would warp the results of any resource planning that relies on it as a basis for estimating the amount of load that is expected to materialize;¹⁵⁵ and

WHEREAS, ENO argues that Joint Intervenors' witness Dr. Stanton admitted at the hearing that she did not conduct any analysis of the DSM potential in New Orleans;¹⁵⁶ and

WHEREAS, ENO criticizes the Joint Intervenors' witnesses reliance upon comparisons to DSM levels achieved in other, primarily Northeastern states, without attempting to determine whether ENO is comparable to any of the higher-achieving states.¹⁵⁷ ENO argues that DSM savings can be affected by different utility avoided costs, different retail rates, different maturity in energy efficiency work force, and different customer mixes.¹⁵⁸ ENO argues that the evidence indicates that the level of DSM savings actually achieved by states in geographic proximity to Louisiana is much lower, ranging from 0.06% to 0.39% across nine southeastern states, compared to ENO's 0.34% achievement;¹⁵⁹ and

¹⁵³ ENO Post-Hearing Brief at 19, *citing* Supplemental and Amending Application of Entergy New Orleans, Inc., Hearing Transcript, Docket No. UD-16-02, 20-21 (Dec. 19, 2017) ("Hr'g Tr. 12/19/17") and Hr'g Tr. 12/21/17, 20-21.

¹⁵⁴ ENO Post-Hearing Brief at 19, *citing* to Hr'g Tr. 12/19/17, 23 and Excerpt of Ex. SEC-11 with handwritten notation of Wärtsilä 128 MW (HSPM) ("AP-3").

¹⁵⁵ ENO Post-Hearing Brief at 19-20.

¹⁵⁶ ENO Post-Hearing Brief at 20, *citing* Hr'g Tr. 12/21/17, 22.

¹⁵⁷ ENO Post-Hearing Brief at 21.

¹⁵⁸ ENO Post-Hearing Brief at 21, *citing* Rebuttal Testimony and Exhibits of Seth Cureington, Docket No. UD-16-02, at 29 (Nov. 30, 2017) (HSPM) ("Cureington-8").

¹⁵⁹ ENO Post-Hearing Brief at 19-21, *citing* Cureington-8, Ex. SEC-20.

WHEREAS, ENO retained Navigant to assess the achievability and cost-effectiveness of the Council's 2% DSM Goal.¹⁶⁰ ENO reports that Navigant concluded in its report that, while it is possible, in academic theory to achieve 2% savings from energy efficiency measures in New Orleans, the assumptions required to force their proprietary DSM simulator model to solve for 2% annual savings in New Orleans were theoretical and required Navigant to relax industry standard thresholds for cost-effectiveness, incentive levels, administrative costs, and market saturation and further assume that new measures not in existence today will be invented and available at some unknown future date.¹⁶¹ ENO states that under those highly theoretical and arguably unreasonable assumptions, Navigant essentially forced its model to produce the 2% aspirational goal and estimated a price tag of \$2.3 billion over the planning horizon.¹⁶² ENO argues that using such assumptions in its long-term resource planning is not reasonable;¹⁶³ and

WHEREAS, ENO argues that the Joint Intervenors are also incorrect that ENO should have used at least Navigant's "High Case Achievable Scenario" savings level of 0.85% in calculating its peak load forecast.¹⁶⁴ ENO argues that this case represents a ceiling as to what might be possible, and not a floor, and therefore it is not appropriate to utilize that figure in preparing ENO's forecast of the load it will realistically be required to serve;¹⁶⁵ and

WHEREAS, ENO also argues that there is no basis upon which to conclude that DSM can meet the need that exists today because DSM takes time to accumulate.¹⁶⁶ ENO states that it would likely take 10-20 years to get to the level of demand response that ENO needs to even get close to the identified needs. ENO argues that it has included the forecasted effects of Energy

¹⁶⁰ ENO Post-Hearing Brief at 21.

¹⁶¹ ENO Post-Hearing Brief at 21-22, *citing* Cureington-6, Ex. SEC-14.

¹⁶² ENO Post-Hearing Brief at 21-22, *citing* Cureington-6, Ex. SEC-14.

¹⁶³ ENO Post-Hearing Brief at 21-22, *citing* Cureington-6, Ex. SEC-14.

¹⁶⁴ ENO Post-Hearing Brief at 22-23.

¹⁶⁵ ENO Post-Hearing Brief at 22-23.

¹⁶⁶ ENO Post-Hearing Brief at 23.

Smart programs through Program Year 6, the last full year for which data is available, and that to make additional, speculative reductions would be unreasonable given the number of uncertain factors already embedded in the forecast.¹⁶⁷ ENO also points out that they have included an annual reduction in projected sales that reaches 1.5% in 2022 to account for the anticipated but uncertain effects of the proposed deployment of Advanced Metering Initiative (“AMI”), and that its load forecast does not include any adjustments for potential increases that could occur due to faster-than-projected growth or adoption of electric vehicles (“EVs”) by customers.¹⁶⁸ ENO also argues that the forecast assumes existing rooftop solar will continue providing the same level of load reduction and similarly does not account for potential decreases in the rated capacity of existing resources;¹⁶⁹ and

WHEREAS, ENO also objects to the Joint Intervenors argument that ENO’s projections of continued growth in behind-the-meter solar are understated, and that ENO should assume a greater reduction in peak load due to those resources.¹⁷⁰ ENO argues that the historical factors driving behind-the-meter solar growth have changed and as a result, it will not continue to grow at a rate similar to past growth.¹⁷¹ ENO explains that initial growth was spurred by federal and state tax credits that covered up to 80% of the cost of a typical rooftop solar system and a net metering tariff allowing customers to sell excess energy back to ENO.¹⁷² ENO notes that neither Dr. Stanton nor Mr. Fagan did any analysis of the potential continued growth of behind-the-meter rooftop solar in New Orleans.¹⁷³ ENO argues that going forward, it reasonably expects that the number of new installations will continue to decrease to a *de minimus* point following

¹⁶⁷ ENO Post-Hearing Brief at 23-24.

¹⁶⁸ ENO Post-Hearing Brief at 25.

¹⁶⁹ ENO Post-Hearing Brief at 26.

¹⁷⁰ ENO Post-Hearing Brief at 27.

¹⁷¹ ENO Post-Hearing Brief at 27, *citing* Cureington-8 at 38.

¹⁷² ENO Post-Hearing Brief at 27, *citing* Cureington-8 at 39.

¹⁷³ ENO Post-Hearing Brief at 27, *citing* Hr’g Tr. 12/19/17, 27 and Hr’g Tr. 12/21/17, 23-25.

expiration of the existing state tax credit at the end of 2017, the phase-down of federal tax credits that will begin in 2020 and, ultimately, will significantly reduce subsidies to customers and installation companies;¹⁷⁴ and

WHEREAS, ENO also opposes the Joint Intervenors' assertion that it failed to properly account for ENO's commitment to 100 MW of solar resources.¹⁷⁵ ENO argues that according to ENO's witness Cureington's analysis, including both the 100 MW of planned solar resources and the 128 MW RICE unit still results in a capacity deficit at the end of the 20-year period of 70 MW.¹⁷⁶ ENO also argues that building the CT unit in addition to the 100 MW of renewables results in a capacity excess of only 28 MW at the end of the 20-year planning period, and that carrying some excess capacity during the planning period is not unreasonable.¹⁷⁷ ENO believes that the additional capacity associated with the larger CT Alternative would provide additional benefits to mitigate market- and supply-related risks, which ENO argues is reasonable in consideration of ENO's unique planning circumstances, and the smaller RICE units would provide similar benefits over the first half of the planning horizon;¹⁷⁸ and

WHEREAS, ENO also argues that including solar resources as "existing resources" in the Company's load and capability forecast is not reasonable because, although the Company is committed to adding up to 100 MW of solar resources to its portfolio, the timing and location of those resources are uncertain. ENO urges that even more important is that, regardless of location and timing, witness Cureington explained that solar resources simply will not meet the Company's peaking capacity need;¹⁷⁹ and

¹⁷⁴ ENO Post-Hearing Brief at 27, *citing* Cureington-8 at 40.

¹⁷⁵ ENO Post-Hearing Brief at 29.

¹⁷⁶ ENO Post-Hearing Brief at 29.

¹⁷⁷ ENO Post-Hearing Brief at 29.

¹⁷⁸ ENO Post-Hearing Brief at 30.

¹⁷⁹ ENO Post-Hearing Brief at 30-31, *citing* Hr'g Tr. 12/18/2017, 327-328.

WHEREAS, ENO argues that the parties opposing NOPS offer unreasonable speculation to manipulate future MISO capacity prices in an attempt to undermine the Company’s economic analysis.¹⁸⁰ ENO explains that one of the components of its economic analysis is a projection of future MISO PRA clearing prices, which is based on an assumption that as equilibrium of supply and demand occurs and excess capacity in the market tightens, capacity prices in MISO will trend upwards and eventually reach the CONE.¹⁸¹ ENO argues that this is the law of supply and demand, and that Air Products witness Brubaker and Joint Intervenors’ witness Dr. Stanton conceded that capacity prices would rise as the surplus decreases.¹⁸² As ENO notes, however, Joint Intervenors’ witnesses Mr. Fagan and Dr. Stanton dispute that equilibrium is likely to occur, and they believe that prices in MISO will stay low;¹⁸³ and

WHEREAS, ENO argues that Dr. Stanton depends upon Mr. Fagan’s price projections, and that Mr. Fagan’s position that the current surplus will continue indefinitely is contrary to the credible evidence, rests on unwarranted speculation about potential future projects that may be constructed by other utilities in MISO over which neither the Company nor the Council has any control, and unreasonably relies on historical MISO PRA clearing prices that are not indicative of the future and are influenced by a flawed capacity market and a current capacity surplus;¹⁸⁴ and

WHEREAS, ENO argues that Mr. Fagan ignores that the projected surplus in the MISO report that he cites could be undone by a single plant retiring early, and that there are over 3,200 MW of aging legacy resources in MISO Local Resource Zone (“Zone”) 9 that could deactivate earlier, and that he ignores the importance of a narrow committed capacity margin in favor of

¹⁸⁰ ENO Post-Hearing Brief at 31.

¹⁸¹ ENO Post-Hearing Brief at 31.

¹⁸² ENO Post-Hearing Brief at 31-32.

¹⁸³ ENO Post-Hearing Brief at 31-32.

¹⁸⁴ ENO Post-Hearing Brief at 32.

focusing on “potential” capacity additions without any evidence of the likelihood of such additions.¹⁸⁵ ENO argues that closing one’s eyes to risk and hoping for the best is not prudent resource planning;¹⁸⁶ and

WHEREAS, ENO argues that its projection of equilibrium occurring around 2022 is consistent with highly credible sources such as the MISO’s own projections of resource adequacy, the 2016 North American Electric Reliability Corporation’s (“NERC”) long-term reliability assessment, the MISO Independent Market Monitor (“IMM”), and IHS Market’s annual capacity value forecast for MISO.¹⁸⁷ ENO argues that it is more reasonable to rely upon these sources than on Mr. Fagan’s speculation;¹⁸⁸ and

WHEREAS, ENO also states that there are several flaws with Mr. Fagan’s reliance upon historically low MISO PRA clearing prices as evidence of a continuing capacity surplus.¹⁸⁹ First, ENO argues it is not reasonable to rely on short-term annual purchases of capacity credits through the PRA to address long-term needs.¹⁹⁰ Second, ENO argues that it is illogical to assume that one year’s clearing price is any indication of the next year’s price.¹⁹¹ Third, ENO argues that it is not surprising that, in general, historical PRA clearing prices in MISO South have been low, and that it is undisputed that there is currently a capacity surplus in MISO, but the evidence shows this surplus will not continue in perpetuity.¹⁹² Fourth, ENO argues that it is not reasonable to rely on historically low MISO PRA prices because, according to the MISO IMM 2016 State of the Market Report, the demand for capacity in the PRA continues to poorly

¹⁸⁵ ENO Post-Hearing Brief at 32-33.

¹⁸⁶ ENO Post-Hearing Brief at 34.

¹⁸⁷ ENO Post-Hearing Brief at 34-35, *citing* the 2017 MTEP Resource Adequacy Report (Book 2) and Cureington-8, Exs. SEC-15, SEC-17, SEC-18 and SEC-19.

¹⁸⁸ ENO Post-Hearing Brief at 35.

¹⁸⁹ ENO Post-Hearing Brief at 35.

¹⁹⁰ ENO Post-Hearing Brief at 36.

¹⁹¹ ENO Post-Hearing Brief at 36.

¹⁹² ENO Post-Hearing Brief at 36.

reflect its true reliability value, which undermines its ability to provide efficient signals for investment and retirement decisions;¹⁹³ and

WHEREAS, ENO argues that the MISO IMM 2016 State of the Market Report noted that the addition of fast-start capacity in the Narrow Constrained Areas in MISO South would be extremely valuable, and Mr. Fagan admitted at the hearing that he has not reviewed the report, nor was he familiar with narrow constrained areas in MISO or aware of whether New Orleans was in a narrow constrained area, which it is;¹⁹⁴ and

WHEREAS, ENO also disagrees that Advisors' witness Mr. Rogers' sensitivity analysis using a \$6/kW-year capacity price that remains essentially flat over the 20-year planning horizon provides useful information, and argues that it should not be given any weight;¹⁹⁵ and

WHEREAS, ENO argues that regardless of the outcome of the economic evaluation, the Transmission Alternative would not provide the reliability benefits needed by New Orleans and would not meet the identified need for a local source of peaking and reserve capacity;¹⁹⁶ and

WHEREAS, the Council acknowledges that the evidence in the record indicates that the 2% DSM Goal may be unachievable. However, the Council has retained an independent consultant to conduct its own DSM Potential Study to determine the appropriate amount of cost-effective DSM that the Council should pursue as a long-term goal. In addition, the Council for the reasons set forth by the Intervenors and Advisors above, believes that ENO most likely has underestimated the cost savings that will be achieved through energy efficiency in its calculations of how much capacity it will need; and

¹⁹³ ENO Post-Hearing Brief at 37.

¹⁹⁴ ENO Post-Hearing Brief at 37, *citing* Cureington-8, Exs. SEC-15 at 15, 18.

¹⁹⁵ ENO Post-Hearing Brief at 38.

¹⁹⁶ ENO Post-Hearing Brief at 40.

WHEREAS, on the other hand, given the uncertainty about precisely how much energy efficiency will be achieved, the inability of any party to state with reasonable certainty how much capacity will be offset by energy efficiency, and the Council's obligation to assure reliable electric service to New Orleans, the Council does not believe it would be prudent at this time to require ENO to rely upon achieving the 2% DSM Goal for its long-term planning purposes or to defer the acquisition of additional capacity based on the assumption that the 2% DSM Goal will be reached; and

WHEREAS, the Council finds that the evidence in the case seems to indicate that there will most likely be energy efficiency savings at a level somewhere between ENO's projection that assumes no new savings beyond what was implemented in Energy Smart Program Year 6 and the level that would occur if the 2% DSM Goal was met; and

WHEREAS, the Council believes that the various MISO capacity price forecasts and analyses presented by the parties bracket the possible outcomes, with the high end being what would happen if MISO capacity prices approach CONE and the low end being what would happen if they remain at their historically low levels. The Council concludes that the testimony in this case indicates that if the MISO capacity market prices escalate significantly, the CT Alternative would be the most cost-effective alternative, while if prices stay low, the Transmission Alternative would be the most cost-effective, both of which enhance the risk to ratepayers should such forecasts not materialize. However, it appears that the anticipated costs of both of these options swing widely as MISO capacity prices rise and fall, making them much more expensive when capacity prices go in the other direction. The Council notes, as the record demonstrates,¹⁹⁷ the RICE Alternative, is less dependent upon MISO capacity prices to support its economics thus reducing ratepayer risk and, it remains relatively more predictable as MISO

¹⁹⁷ Rogers-1, at 42, 44.

capacity prices fluctuate. Therefore, there is less risk if forecasts of the direction of MISO capacity prices that prove incorrect with the RICE Alternative than with either the CT Alternative or the Transmission Alternative; and

WHEREAS, the Council concludes that the weight of the evidence demonstrates that ENO has shown an immediate and future need for peaking and reserve capacity that is not mitigated even if the Council's 2% DSM Goal is achieved. In light of the known volatility of MISO capacity market prices, the Council also agrees with ENO and the Advisors that it would not be appropriate for ENO to rely on the MISO capacity market to meet its long-term resource needs; and

B. Whether ENO has demonstrated a reliability need

WHEREAS, ENO argues that the evidence in this case clearly shows that the City of New Orleans faces current and persisting reliability risks since the deactivation of the Michoud units in June 2016. If left unmitigated, these risks have the potential to produce devastating and highly disruptive consequences including the possibility of cascading outages resulting from certain transmission contingencies and the inability to restore power quickly following a hurricane or other event causing the incoming transmission lines to ENO to fail and ENO's system to be islanded;¹⁹⁸ and

WHEREAS, ENO asserts that NOPS is the only reliable way to mitigate these concerns because the Council can have a high degree of confidence that it can actually be constructed; and that it can be constructed on an expedited basis. ENO contends that constructing the RICE Alternative will not only mitigate the risk of widespread outages, but will also provide local

¹⁹⁸ ENO Post-Hearing Brief at 40.

generation for hurricane responses, black-start capability, reactive power, and create the ability for at least some economic growth in the City of New Orleans;¹⁹⁹ and

WHEREAS, ENO urges the Council to disregard Joint Intervenors' wait-and-see approach, which is supported by witnesses who have no experience with the New Orleans transmission grid or with hurricane restoration efforts; who have never been responsible for serving utility customers reliably; and whose proposed alternatives are speculative;²⁰⁰ and

WHEREAS, ENO takes issue with Joint Intervenors' suggestion that it rely on load shedding to address the reliability concerns;²⁰¹ and

WHEREAS, ENO explains that over the past 10 years, New Orleans went from having three generating units within its borders to zero units, with the last two units retiring in June 2016. The transmission topology in DSG, however, which was designed to be supported by strategically placed generation in its center, and at its western and eastern (New Orleans) edges, has not materially changed.²⁰² DSG is a "load pocket," and the City is particularly sensitive to reliability issues because of its location on a physical and electrical peninsula, with limited transmission facilities that can import power into New Orleans.²⁰³ Without generation in the City, the transmission system has been increasingly stressed, leading to the risk of overloading and cascading blackouts over large segments of the City;²⁰⁴ and

WHEREAS, ENO asserts that a new dispatchable local generator to replace some of the generation lost with the deactivation of Michoud is the only viable option to address the reliability problem facing New Orleans;²⁰⁵ and

¹⁹⁹ ENO Post-Hearing Brief at 40, 60-64.

²⁰⁰ ENO Post-Hearing Brief at 41.

²⁰¹ ENO Post-Hearing Brief at 48.

²⁰² ENO Post-Hearing Brief at 42-43.

²⁰³ ENO Post-Hearing Brief at 42.

²⁰⁴ ENO Post-Hearing Brief at 43, 51-53.

²⁰⁵ ENO Post-Hearing Brief at 45.

WHEREAS, ENO notes that the reliability problem that came about with the retirement of Michoud, which even Joint Intervenors concede exists,²⁰⁶ would normally trigger NERC violations, however it is not presently in violation of NERC standards because it has a corrective action plan in place which is the NOPS proposal;²⁰⁷ and

WHEREAS, ENO argues that it needs a minimum of 128 MW of capacity. The 128 MW RICE Alternative would mitigate most of ENO's reliability issues until 2027, when transmission upgrades or the addition of one additional RICE unit might also be needed.²⁰⁸ Until 2027, the 128 MW RICE Alternative would unload all of the transmission lines in the DSG, making it more likely that the Company could get a transmission outage in 2027 to make upgrades, if necessary;²⁰⁹ and

WHEREAS, ENO points out that no party seriously contested that having local generation in a storm-prone area is imperative to quick restoration of service.²¹⁰ This is particularly crucial, ENO argues, when damage to the transmission system impedes restoration efforts until the transmission system can be repaired. Having a local resource can provide an alternative source of power to the distribution system over shorter distances of transmission. ENO cites Hurricane Gustav as a recent example where this proved true.²¹¹ ENO points out that the Advisors, Air Products and Joint Intervenors' witnesses are in agreement on this;²¹² and

WHEREAS, ENO states that it is undisputed that a unit with black-start capability could prove vital if the grid goes totally dark;²¹³ and

²⁰⁶ ENO Post-Hearing Brief at 44-45, 47.

²⁰⁷ ENO Post-Hearing Brief at 46.

²⁰⁸ ENO Post-Hearing Brief at 49.

²⁰⁹ ENO Post-Hearing Brief at 50.

²¹⁰ ENO Post-Hearing Brief at 55.

²¹¹ ENO Post-Hearing Brief at 57-58.

²¹² ENO Post-Hearing Brief at 56.

²¹³ ENO Post-Hearing Brief at 55-60.

WHEREAS, ENO urges the Council that transmission upgrades alone are not a viable alternative. There are extraordinary constructability problems associated with the transmission upgrades, not the least of which are that (1) the risk of cascading outages would increase dramatically, and (2) the ability to obtain necessary outages may be insurmountable.²¹⁴ In the first half of 2017 alone, nine transmission outages were denied.²¹⁵ ENO witness Charles Long estimated that construction of the five upgrades that would be needed if no generation were constructed in New Orleans could take 8 to 10 years, and construction of even one line could take several years. Mr. Long explained that this is because in the first year of the project, the Company would take the first line out for a month in the fall and then a month in the spring, and the process would be repeated for several years until the project is completed. The outage for one project might be 12 months, but you cannot take a line out of service for 12 months straight, because the outage can only occur at the lowest load times.²¹⁶ Witnesses for Joint Intervenors and for the Advisors each acknowledged the difficulties ENO would face in trying to construct transmission.²¹⁷ And if ENO could not get the outages, it would need to build along new transmission paths, which has other challenges that would add time and costs to the project;²¹⁸ and

WHEREAS, ENO says that the Joint Intervenors have not, and cannot, offer any analysis that supports the feasibility of constructing any of the upgrades in an accelerated manner, while it is uncontested that NOPS can be constructed without needing to take any extended transmission outages;²¹⁹ and

²¹⁴ ENO Post-Hearing Brief at 65.

²¹⁵ ENO Post-Hearing Brief at 65.

²¹⁶ ENO Post-Hearing Brief at 65.

²¹⁷ ENO Post-Hearing Brief at 66-67.

²¹⁸ ENO Post-Hearing Brief at 66-67.

²¹⁹ ENO Post-Hearing Brief at 66-67.

WHEREAS, ENO also objects to Joint Intervenors' other proposed approaches to the reliability problem as speculative and unsubstantiated. The Joint Intervenors advocate increased solar, increased load reductions over time (energy efficiency), and increased demand response, either alone or in combination.²²⁰ But none of these, according to ENO, has been shown to be an effective solution to the pressing reliability issue. ENO notes that Joint Intervenors' witness Mr. Fagan, who does not have electrical engineering or transmission planning experience, conducted no assessment to determine what combination of resources might address ENO's reliability needs.²²¹ Nor did Joint Intervenors' witness Mr. Lanzalotta, who has no experience in Louisiana, conduct any independent analysis about the likelihood that increased energy efficiency might address ENO's reliability issues.²²² However, ENO did conduct a reliability analysis, including implementation of the Council's full 2% DSM Goal, and the results showed that there still was risk of cascading outages;²²³ and

WHEREAS, with respect to the addition of solar to ENO's system, ENO argues that Mr. Lanzalotta agreed with ENO that the amount of solar that is added depends on customer behavior. ENO points out that Mr. Lanzalotta had done no independent analysis regarding the ability of distributed resources to affect the reliability issues in New Orleans.²²⁴ Further, there is not enough land in New Orleans East to install the 200 MW of solar that Joint Intervenors advocate as a solution. Mr. Lanzalotta also had not done any independent analysis of the potential of DSM to address reliability, which Joint Intervenors also advocate.²²⁵ ENO notes that Air Products agrees that there are limits to DSM, including that there are only a few customers that

²²⁰ ENO Post-Hearing Brief at 70.

²²¹ ENO Post-Hearing Brief at 71.

²²² ENO Post-Hearing Brief at 71.

²²³ ENO Post-Hearing Brief at 72.

²²⁴ ENO Post-Hearing Brief at 72-73, 82-83.

²²⁵ ENO Post-Hearing Brief at 73.

can accept interruptible power, and in any event, ENO witness Mr. Charles Long and Advisors' witness Mr. Movish concluded that curtailing the current interruptible customers would not solve the reliability problem;²²⁶ and

WHEREAS, ENO states that reliance on other planned generators in the region will not alleviate the reliability issue. ENO already included all generators planned in the region in its analysis, and concluded that they do not eliminate the risk of cascading outages.²²⁷ And upgrading auto-transformers within ENO's service territory, or installing battery storage, are not viable solutions. ENO would be unlikely to get the outage needed to upgrade auto-transformers, and doing so would create "extraordinary risks" to the electric grid.²²⁸ And there is nothing in the record that would indicate that battery storage would address the reliability issue. Among other challenges, batteries have limited usefulness (only about four hours of charge), and they are net loads, not generators (*i.e.*, they consume more power than they discharge);²²⁹ and

WHEREAS, Air Products agrees that ENO has a reliability need. Specifically, Air Products states that ENO witness Mr. Charles Long addressed local reliability needs in his Supplemental and Amending Direct Testimony and noted that Mr. Charles Long testified that "[b]y 2019, if NOPS is not constructed, several 230 kV and 115 kV lines in DSG would overload without additional transmission investment. In addition, a Category P6 contingency event would result in severe overloads of several 115 kV lines in the DSG area, leading to uncontrollable cascading outages of up to six 115 kV transmission branches. Consequently, a voltage collapse and load shed event in the ENO transmission network would result from the severe reactive power deficit due to the loss of the transmission branches and reactive power support in the ENO

²²⁶ ENO Post-Hearing Brief at 74-75.

²²⁷ ENO Post-Hearing Brief at 76.

²²⁸ ENO Post-Hearing Brief at 76-77.

²²⁹ ENO Post-Hearing Brief at 78-79.

transmission grid. Also in 2019, a breaker failure contingency at the Ninemile 230 kV substation was observed to result in three 230 kV transmission line overloads and one 115 kV transmission line overload;”²³⁰ and

WHEREAS, further relying on the testimony of ENO witness Mr. Charles Long, Air Products explains that unless generation capacity is constructed in the ENO service territory, the amount of transmission investment that would be necessary to address reliability concerns exceeds \$50 million – assuming that it would be possible to site the necessary transmission lines in wetlands and heavily populated areas, complicated further by soil conditions ill-suited for construction of transmission infrastructure, meaning that construction may not even be possible. Moreover, Air Products argues that even if the transmission could be constructed, all transmission provides is “wires;” it does not provide any additional generation resource, and as such is an inferior way to supply loads in ENO’s load pocket;²³¹ and

WHEREAS, Air Products explains that Advisors’ witness Mr. Movish reached a similar conclusion. Namely, that construction of capacity within the ENO service territory is far superior to, and far less risky than, attempting to solve the reliability issues with transmission;²³² and

WHEREAS, NOCS argues that ENO has not demonstrated a generation-related reliability need.²³³ According to NOCS, “[a]t best, ENO has only shown a transmission-related reliability need.”²³⁴ NOCS asserts that ENO failed to show that building generating capacity is the most reasonable and cost-effective method of addressing the transmission reliability need.²³⁵

²³⁰ Air Products Post-Hearing Brief at 10-11, *citing* Supplemental and Amending Direct Testimony of Charles W. Long, Docket No. UD-16-02, at 9:2-11 (July 6, 2017) (“C. Long-2”).

²³¹ Air Products Post-Hearing Brief at 11.

²³² Air Products Post-Hearing Brief at 11-12.

²³³ NOCS Post-Hearing Brief at 8.

²³⁴ NOCS Post-Hearing Brief at 9.

²³⁵ NOCS Post-Hearing Brief at 9.

Referencing the Advisors' testimony that the Transmission Alternative is economically more attractive than either the CT Alternative or the RICE Alternative (yet also noting that the Advisors do not recommend the Transmission Alternative due to the uncertainty surrounding the costs and timing of the Transmission Alternative), NOCS also asserts that the Advisors recognize that ENO does not face a generation reliability problem but rather a transmission reliability problem;²³⁶ and NOCS relies on the testimony of Air Products witness Dauphinais to support its assertion that ENO faces a transmission reliability problem and that the Transmission Alternative is the most cost-effective means of solving that problem; and

WHEREAS, NOCS says that it "agrees with the Council's Advisors that the 'Do Nothing Option' is not sustainable;"²³⁷ and

WHEREAS, NOCS argues that instead of the generation proposed in the instant docket, ENO should have acquired, through a power purchase agreement ("PPA"), a portion (roughly 20% of the capacity) of the St. Charles Power Station, a new CCGT to be constructed by ELL. NOCS asserts that the unit costs of the RICE and CT Alternatives far exceed the unit cost of the St. Charles Power Station.²³⁸ According to NOCS, ENO's disregard of the St. Charles Power Station as a potential resource option undermines any assertion that ENO faces a reliability need, or, if it does have a reliability need, that the NOPS project is the lowest reasonable cost solution to meet that need. Nevertheless, NOCS admits that the record does not contain an analysis of whether a PPA with ELL for 20% of the St. Charles Power Station's capacity could have provided sufficient reliability benefits to fully address ENO's needs;²³⁹ and

²³⁶ NOCS Post-Hearing Brief at 9-10.

²³⁷ NOCS Post-Hearing Brief at 10-11.

²³⁸ NOCS Post-Hearing Brief at 11-12. According to NOCS, the RICE Alternative is estimated to cost \$1,640/kW, and the CT Alternative is estimated to cost \$1,026/kW, as compared to the \$886/kW price tag of the St. Charles Power Station CCGT. *Id.* at 12.

²³⁹ NOCS Post-Hearing Brief at 12.

WHEREAS, NOCS acknowledges, that “the Council may find that there is sufficient value in the ancillary benefits that may accrue from constructing generating capacity within the City – which currently lacks any generation – to justify adding generating capacity.”²⁴⁰ In that regard, NOCS acknowledges that should the Council decide that new generating capacity inside the City would serve the public convenience and necessity, is in the public interest, and is prudent, it should conditionally approve the RICE Alternative, and not the CT Alternative;²⁴¹ and

WHEREAS, the Joint Intervenors take issue with ENO’s and the Advisors’ assertions that the New Orleans transmission system is currently unreliable and at unacceptable risk of NERC violations and cascading outages. The Joint Intervenors also criticize the assertion that the lack of local generation in the DSG load pocket leaves the Company at risk from storm-related outages, and leaves the city without a source of dynamic reactive power for voltage control. According to the Joint Intervenors, the consequences of those reliability risks are overstated and unfounded because (1) ENO admits that it does not have any specific resource adequacy or transmission security need for a new gas generation unit, if it “develops a plan to reinforce five transmission lines at a cost of approximately \$57 million,” or if “the Company meets NERC transmission standards with alternative reinforcements that it has, thus far, failed to evaluate,”²⁴² (2) ENO has failed to seriously evaluate any transmission reliability or reactive power alternatives, there have been no cascading outage events since the Company’s deactivation of Michoud, and the fact that ENO’s preferred alternative – the 226 MW CT – cannot provide black-start support, and will not provide any reliability benefits for at least three years, and (3) ENO failed to provide information necessary – and, in some instances, specifically

²⁴⁰ NOCS Post-Hearing Brief at 14.

²⁴¹ NOCS Post-Hearing Brief at 3, 14.

²⁴² Joint Intervenors’ Post-Hearing Brief at 24.

requested by the Council – to make an informed decision about the reliability need for any gas generation;²⁴³ and

WHEREAS, Joint Intervenors argue that ENO does not have any “specific reliability need for a new gas plant,”²⁴⁴ as long as the Company develops a contingency plan that includes modest transmission improvements. According to Joint Intervenors, there are two categories of reliability requirements: (1) resource adequacy, and (2) transmission security needs. According to Joint Intervenors, ENO acknowledges that gas-fired generation is not necessary to address either need. They opine that as long as the transmission improvements are made, resource adequacy needs can be met by resources located within and outside of the DSG load pocket, without construction of NOPS, by relying on MISO’s Zone 9 capacity or Ninemile Station which can provide reactive power. The Joint Intervenors also argue that additional dynamic reactive supply can be had through the installation of Static Var Compensation (“SVC”) or synchronous condensing devices;²⁴⁵ and

WHEREAS, Joint Intervenors argue that there is no specific requirement to install gas-fired capacity to address the potential NERC P6 contingencies; no such events have occurred since the deactivation of Michoud, and the Company has not quantified the risk of any such contingency. Further Joint Intervenors state that “despite the apparent risks of a NERC P6 contingency, the Company never warned the Council or the Advisors of any such risk prior to filing this docket;”²⁴⁶ and

WHEREAS, Joint Intervenors argue that the Company’s own study shows that it can address transmission security reliability issues by improving five transmission lines at a cost of

²⁴³ Joint Intervenors’ Post-Hearing Brief at 24.

²⁴⁴ Joint Intervenors’ Post-Hearing Brief at 25.

²⁴⁵ Joint Intervenors’ Post-Hearing Brief at 25.

²⁴⁶ Joint Intervenors’ Post-Hearing Brief at 26.

approximately \$57 million, or through other alternative reinforcements. In this regard, Joint Intervenors note that during its evaluation of the Attachment Y for the retirement of the Michoud units, MISO concluded that generation is not required at Michoud to maintain reliability if the transmission improvements in the MISO Transmission Expansion Plan (“MTEP”) are implemented. According to Joint Intervenors, “ENO admits the system will be NERC compliant with transmission upgrades,”²⁴⁷ and claims that the Company does not dispute that those upgrades can be constructed. Joint Intervenors also claim that there is no requirement for ENO to have local generation to provide black-start services, or in aid of restoration during extreme storm events;²⁴⁸ and

WHEREAS, Joint Intervenors argue that ENO’s and the Advisors’ dire reliability concerns are belied by the Company’s failure to seriously evaluate any transmission reliability or generation alternatives since the Michoud units were deactivated. Similarly the Joint Intervenors assert ENO’s preferred alternative – the 226 MW CT – cannot provide black-start support, and will not provide any reliability benefits for at least three years while it is being constructed. Joint Intervenors claim that the reliability risks could be effectively mitigated with as few as 70 MW of generation, meeting the Council’s 2% DSM Goal and transmission improvements in 2027;²⁴⁹ and

WHEREAS, Joint Intervenors argue that the Company has failed (or refused) to provide the Council or the public with information necessary and, in some instances, specifically requested by the Council – —to make an informed decision about the need for gas generation. This failure directly contravenes the Council’s admonishment in the show cause order that the

²⁴⁷ Joint Intervenors’ Post-Hearing Brief at 27.

²⁴⁸ Joint Intervenors’ Post-Hearing Brief at 27.

²⁴⁹ Joint Intervenors’ Post-Hearing Brief at 28-29.

CT decision “demands the maximum scrutiny possible in an open and transparent process.”²⁵⁰ It is well-established that a utility “does not meet its burden of proof” of demonstrating that a proposed generation investment is necessary to serve the public interest “by mere speculation, guesswork, hopes or aspirations.”²⁵¹ Instead, “a present *need* must be established” as part of a “reasoned investigation of all relevant factors and alternatives” as they existed at the time the decision;²⁵² and

WHEREAS, Joint Intervenors argue that ENO has failed to meet its burden of proof by its failure to provide the Council with information necessary to determine whether new gas-fired generation is necessary to maintain system reliability. Moreover, the Joint Intervenors assert that the Company’s assertions about system reliability, and in particular, the ability of transmission reinforcements and alternatives to meet any reliability needs, are premised on speculation and guesswork. Joint Intervenors argue that the Council should disregard ENO’s claims that the transmission upgrades will take too long, or are too difficult to implement as they are conclusory assertions because ENO admits that it did not conduct any assessment of cost, feasibility, or the time necessary to make those upgrades;²⁵³ and

WHEREAS, Joint Intervenors further argue that ENO’s claims of potential catastrophe are not persuasive because ENO did not evaluate the Council’s existing energy efficiency programs’ reductions to peak load requirements that would reduce the risk of reliability violations by lowering system stress.²⁵⁴ Similarly, Joint Intervenors note that ENO admits that it did not evaluate load shedding or curtailment of additional industrial load to mitigate

²⁵⁰ Joint Intervenors’ Post-Hearing Brief at 30, *citing* Resolution No. R-16-263 at 7.

²⁵¹ Joint Intervenors’ Post-Hearing Brief at 30, *citing In the Matter of the Application of KCP&L Greater Missouri Operations Co. v. Missouri Pub. Serv. Comm’n*, 515 S.W. 3d 754, 760 (W.D. Mo. App. Ct. 2017).

²⁵² Joint Intervenors’ Post-Hearing Brief at 30, *citing In the Matter of the Application of KCP&L Greater Missouri Operations Co. v. Missouri Pub. Serv. Comm’n*, 515 S.W. 3d at 760.

²⁵³ Joint Intervenors’ Post-Hearing Brief at 29-33.

²⁵⁴ Joint Intervenors’ Post-Hearing Brief at 32.

transmission constraints during peak loading hours or whether additional solar generation, battery storage, DSM, reactive power support, or even smaller generating units could more cheaply and effectively mitigate any potential reliability concerns.²⁵⁵ According to Joint Intervenors this is a critical shortcoming because solar and batteries together can provide both dispatchable real power and reactive power support. In this regard, Joint Intervenors claim that ENO rejected those options because of ENO's belief that there is insufficient space available in New Orleans East to install sufficient solar capacity without evaluating whether there was additional space available on commercial rooftops, or elsewhere, that could be used to interconnect solar capacity to Michoud;²⁵⁶ and

WHEREAS, Joint Intervenors argue that ENO has failed to (a) provide reliable, least-cost service to the residents of New Orleans, (b) properly plan for the deactivation of the units at Michoud, (c) properly analyze the needs of the system, and (d) fully evaluate alternatives to its preferred proposed generation. According to Joint Intervenors, ENO failed to use good business judgment or act in a prudent manner and should not be rewarded for its failure to implement a plan to correct any reliability concerns in a timely manner;²⁵⁷ and

WHEREAS, Joint Intervenors argue that ENO's own analyses show that any long-term reliability risks can be mitigated more efficiently and effectively with a combination of energy efficiency measures, solar generation, and limited transmission upgrades. Similarly, Joint Intervenors assert that the "No NOPS" option – *i.e.*, the transmission upgrade only option – would mitigate any transmission reliability need for New Orleans at a fraction of the cost of a new peaking generation unit in East New Orleans. Further, Joint Intervenors assert that the NOPS options fail to provide any near-term reliability benefits and carry their own set of risks.

²⁵⁵ Joint Intervenors' Post-Hearing Brief at 33.

²⁵⁶ Joint Intervenors' Post-Hearing Brief at 32.

²⁵⁷ Joint Intervenors' Post-Hearing Brief at 33 -37.

Additionally, Joint Intervenors state that the Council should direct ENO to provide the information necessary to fully consider a transmission alternative, along with DSM, solar and/or batteries;²⁵⁸ and

WHEREAS, Joint Intervenors opine that any long-term reliability risks can be mitigated more cheaply and effectively with a combination of energy efficiency measures, solar generation, or limited transmission upgrades. According to Joint Intervenors, ENO admits that making transmission reinforcements to just five transmission line segments would mitigate all the reliability-based system constraints over the next 10 years without building new generation at a fraction of the cost of a new peaking generation unit in New Orleans East. Joint Intervenors state that these transmission upgrades are estimated to cost at the highest estimate, \$57.3 million, which compares favorably to the cost of the CT Alternative at \$232 million, or the cost of the RICE Alternative at \$210 million. Further, Joint Intervenors note that the “No NOPS – Solar” scenario is virtually identical to the RICE Alternative in terms of mitigating reliability risks at a cost that is less expensive than either of ENO’s proposed NOPS alternatives under almost every scenario. Moreover, Joint Intervenors assert that as a result of already “planned transmission upgrades that are expected to be in-service by 2020” under MISO’s MTEP transmission planning, both the “No NOPS – Solar Plus DSM” and RICE Alternatives are equally “effective in preventing cascading outages in the New Orleans area” until 2027, when both options require identical upgrades to the same two 230 kV transmission lines;²⁵⁹ and

WHEREAS, with regard to ENO and Advisor criticisms that (1) the “No NOPS” alternatives are infeasible because the Transmission Alternative is too difficult, too expensive, and too time consuming to mitigate urgent reliability risks, and (2) it is extremely unlikely that

²⁵⁸ Joint Intervenors’ Post-Hearing Brief at 37-38.

²⁵⁹ Joint Intervenors’ Post-Hearing Brief at 41-42.

the Company could obtain sufficient land in close proximity to Michoud to install 200 MW or even 100 MW of solar capacity or achieve the Council's 2% DSM Goal, the Joint Intervenors assert that these criticisms are unfounded, and that the Council should direct ENO to provide the information necessary to fully consider those options in lieu approving either NOPS Alternative;²⁶⁰ and

WHEREAS, Joint Intervenors opine that ENO's and the Advisors' criticisms and arguments are unsupported by the record. Specifically, Joint Intervenors state that ENO admits that it can install the required transmission upgrades by "mid-2021," in sufficient time to mitigate the reliability risks identified in the load flow modeling. Moreover, Joint Intervenors note that ENO has reported "robust" proposals to build up to 325 MW of solar capacity and that the Council has projected that at ENO's current rate of energy efficiency savings, the Company will meet the Council's 2% DSM Goal by 2024;²⁶¹ and

WHEREAS, Joint Intervenors argue that there is no basis for the Council to approve either of the "No NOPS" alternatives because of ENO's failure to perform the level of detailed analysis that Joint Intervenors argue is necessary for the Council's consideration. Specifically, Joint Intervenors state that ENO did not (a) conduct a detailed evaluation of transmission alternatives, (b) perform any of the detailed design and scoping work necessary to provide the timetable required to construct any of the transmission reinforcements purportedly needed to maintain reliability, or (c) conduct any assessment of cost or the time necessary to make those upgrades. Further, Joint Intervenors complain that ENO has not evaluated (1) the Council's existing energy efficiency programs, (2) other DSM opportunities or (3) the availability of

²⁶⁰ Joint Intervenors' Post-Hearing Brief at 43-45.

²⁶¹ Joint Intervenors' Post-Hearing Brief at 44, *citing* City of New Orleans, Climate Action for a Resilient New Orleans, at 30, <https://www.nola.gov/nola/media/Climate-Action/Climate-Action-for-a-Resilient-New-Orleans.pdf>. The Council notes that upon review of the cited reference -"a goal we are on track to meet in 2024" are the Council's but rather, we presume, the author of the document.

additional solar generation options, which could arguably reduce peak load requirements the risk of reliability ;²⁶² and

WHEREAS, Joint Intervenors argue that both of the proposed NOPS units present reliability risks. First, neither of the proposed generation units can be placed in service immediately, 2020 at the earliest for the RICE unit, and 2021 for the CT unit. Second, Joint Intervenors claim a hurricane strong enough to produce major damage to the transmission system also poses the threat of significant damage to any generating units. Moreover, Joint Intervenors note that “[g]iven the Michoud location’s vulnerability to coastal flooding, ENO’s proposal to address reliability concerns with a single large CT, especially one sited in an area subject to routine hurricane events, flooding, and subsidence, only places the area at further risk of reliability constraints;”²⁶³ and

WHEREAS, Joint Intervenors argue that there are alternative means to effectively and quickly mitigate any transmission reliability concerns while longer-term solutions are put into place, including: (1) continued reliance on resources both within and outside of the DSG load pocket (and outside of New Orleans); (2) ongoing MISO South transmission reinforcement projects; (3) additional off-the-shelf transmission reinforcements; (4) installation of additional reactive power; (5) the evaluation and implementation of a combination of options, such as additional steps to reduce peak load, solar photovoltaic (“PV”), and dispatchable battery storage options. Indeed, several of these options already are contributing to reduce system peak loads on ENO’s system, thereby directly mitigating any reliability risk;²⁶⁴ and

WHEREAS, Joint Intervenors argue that there are ample generation resources both within and outside of the DSG load pocket that will continue to ensure resource adequacy until

²⁶² Joint Intervenors’ Post-Hearing Brief at 43-44.

²⁶³ Joint Intervenors’ Post-Hearing Brief at 44-45.

²⁶⁴ Joint Intervenors’ Post-Hearing Brief at 46.

alternative resources are fully deployed. Joint Intervenor specifically note that (a) with the continued operation of the three units at Ninemile Station directly across the river from New Orleans, (b) MISO Zone 9 capacity obligations, which do not include any reliability requirement for New Orleans generation, and (c) there is ample capacity to maintain resource adequacy in the New Orleans area because at the most recent MISO PRA, capacity cleared at extremely low prices. Moreover, Joint Intervenor state that ENO has the authority to ensure that Ninemile Station, Little Gypsy, and Waterford remain operational;²⁶⁵ and

WHEREAS, Joint Intervenor argue that ENO’s own analyses demonstrate that ongoing MISO transmission projects and decreasing load are already working to improve transmission security on the ENO system and will provide ENO with additional time and flexibility to evaluate and implement any additional transmission reinforcements that may be necessary. Specifically, Joint Intervenor point to nine ongoing transmission improvement projects that are contributing to improved transmission reliability in the DSG load pocket. Joint Intervenor note that eight of those nine projects are in or around New Orleans. Joint Intervenor further note that these transmission upgrades are separate from the transmission upgrades ENO witness Charles Long concludes would be necessary under the “No NOPS” alternative. Further, Joint Intervenor state that as a result of these ongoing MISO transmission projects, ENO’s updated July 2017 power flow analyses reflect a reduction in the number of transmission reinforcements required— from eight lines in 2016 to five lines in July 2017. Moreover, Joint Intervenor assert that ENO’s November 2017 revised load forecast showed that only four transmission projects were now required to mitigate any transmission reliability risk;²⁶⁶ and

²⁶⁵ Joint Intervenor’s Post-Hearing Brief at 46-47.

²⁶⁶ Joint Intervenor’s Post-Hearing Brief at 47-48.

WHEREAS, Joint Intervenors state that ENO admits that the MISO transmission projects that are coming online improve reliability, and take issue with the Company's characterization of those transmission projects as the "smallest" factors in the improved modeling results.²⁶⁷ Joint Intervenors contend that Mr. Long's own load flow analysis shows improved reliability as the result of those MISO transmission projects. Specifically, Joint Intervenors argue that ENO's load forecasts for 2019 and 2022 are virtually identical and that any improvement in reliability is not attributable to changes in load but rather is due to MISO transmission improvements coming online in 2020 and ENO's corrections to the DSM forecast. Moreover, Joint Intervenors argue that because these two variables result in a nearly 20% decrease in transmission overloading from 2019 to 2022, under the "No NOPS" scenario, this indicates that ongoing MISO transmission upgrades are not only materially improving transmission reliability in New Orleans, and thereby decreasing the likelihood of cascading outages, but that those transmission improvements will provide ENO with additional flexibility and time to schedule any outages that may be required to address remaining transmission risks or explore additional alternatives, like increased DSM, that can mitigate any remaining reliability risk;²⁶⁸ and

WHEREAS, Joint Intervenors argue that there are alternative transmission reinforcements, which ENO failed to consider, that are readily available and can be implemented within months without requiring new rights of way or extended outages to supplement or repair transmission lines. According to Joint Intervenors, ENO admitted that a second transformer would "allow more flow between the 230 [kV] and 115 [kV] systems and provide helpful

²⁶⁷ Joint Intervenor's Post-Hearing Brief at 49.

²⁶⁸ Joint Intervenors' Post-Hearing Brief at 49-50.

transmission reliability benefits.”²⁶⁹ Similarly, Joint Intervenors argue that ENO failed to provide any support for its assertion that there are significant constructability issues with upgrading transmission lines. In this regard, Joint Intervenors assert that Mr. Long’s view that a particular upgrade would be “extraordinarily” difficult to install is unfounded because ENO owns the substations and thus any obstacles to obtaining rights of way or upgrading miles of transmission lines do not exist in this instance. Moreover, Joint Intervenors claim that because ENO was able to secure the outages required to install a second transformer at the Snake Farm substation, it would be feasible to install similar transmission reinforcements at the two substations most susceptible to critical NERC contingencies;²⁷⁰ and

WHEREAS, Joint Intervenors also argue that Static Var Compensators or synchronous condensers that can supply significant amounts of reactive power and are considered a “valuable” transmission asset. According to Joint Intervenors’ witness Mr. Lanzalotta, dynamic reactive power support options like Static Var Compensation, are the preferred tool for dynamic reactive power support in high voltage transmission grids due to its inherent capability for high-speed response to voltage depressions, and its ability to quickly supply inductive loads, such as air conditioning compressors, elevator drives, and industrial motors;²⁷¹ and

WHEREAS, Joint Intervenors argue that solar PV and dispatchable battery storage are options to reduce peak load. According to Joint Intervenors, ENO can take more aggressive steps to both reduce peak load on its system through additional DSM measures and increase installation of local solar PV and battery options which arguably can provide improved transmission security, help mitigate outage scheduling difficulties, provide dispatchable real

²⁶⁹ Joint Intervenors’ Post-Hearing Brief at 31 n.122, *citing* Hr’g Tr. 12/15/17, 156:3-4; 157:7-11.

²⁷⁰ Joint Intervenors’ Post-Hearing Brief at 50-52.

²⁷¹ Joint Intervenors’ Post-Hearing Brief at 52-53.

power and reactive support.²⁷² In this regard, Joint Intervenors argue that ENO's November 2017 load flow analysis, which "corrected DSM assumptions" and "properly account for the 2% DSM Goal,"²⁷³ shows that the inclusion of additional DSM can materially reduce stress on the system. As noted above, according to Joint Intervenors, applying just that 2% DSM correction, ENO's updated load flow modeling for the "No NOPS," Transmission Alternative shows a reduction in the number of transmission reinforcements needed, from five lines in the July 2017 analysis to four lines in the November 2017 analysis;²⁷⁴ and

WHEREAS, Joint Intervenors opine that ENO's assertion that additional DSM is infeasible is belied by the fact that the Company did not actually conduct any analysis of additional opportunities for DSM load reductions, including the potential for securing additional industrial load shedding or curtailment contracts – an acceptable, NERC-compliant way to deal with transmission reliability risks. Similarly, according to Joint Intervenors, ENO refused to study – and fails to explain – why it cannot secure additional curtailable load. Moreover, Joint Intervenors submit that ENO's claims about the feasibility of reducing load through energy efficiency are similarly unsupported and that ENO's arguments are contradicted by ENO's own energy efficiency consultant, and the City of New Orleans' determination that the Company could actually achieve 3.3% annual energy savings;²⁷⁵ and

WHEREAS, Joint Intervenors argue that ENO also admits that the installation of additional solar resources, interconnected at Michoud, can improve system reliability but that it failed to study whether additional solar resources, including siting solar PV on commercial rooftops, is possible. According to Joint Intervenors, ENO's RFP suggests that local additional

²⁷² Joint Intervenors' Post-Hearing Brief at 53.

²⁷³ Joint Intervenors' Post-Hearing Brief at 54, *citing* C-Long-3 at 42:12-15.

²⁷⁴ Joint Intervenors' Post-Hearing Brief at 54.

²⁷⁵ Joint Intervenors' Post-Hearing Brief at 54-55.

solar resources are, in fact, available and that ENO represented to the Council that there was “robust” participation in the Company’s 2016 renewables RFP process, with 17 conforming proposals representing approximately 325 MW of potential solar PV capacity;²⁷⁶ and

WHEREAS, Joint Intervenors complain that although ENO criticizes the transmission benefits of additional solar capacity because solar is “not a dispatchable resource,” it did not evaluate the potential transmission benefits of additional solar resources coupled with battery storage, which, according to Joint Intervenors, is a dispatchable resource. Further, Joint Intervenors assert that despite the Council’s explicit request that ENO evaluate battery storage alternatives to fossil resources, the Company failed to even consider the possibility that battery storage coupled with renewable resource could provide transmission benefits during peak load, which generally occurs over period of hours;²⁷⁷ and

WHEREAS, Joint Intervenors profess that the Advisors and ENO have absolutely no knowledge of whether batteries could provide reliability benefits, or whether other utilities across the country have installed solar and battery arrays to mitigate transmission reliability issues. In contrast, Joint Intervenors note that Joint Intervenors’ witness Mr. Luckow testified that utilities across the country are actively seeking and procuring battery storage alternatives in lieu of other peaking resources to satisfy local capacity and reliability requirements;²⁷⁸ and

WHEREAS, Joint Intervenors argue that ENO’s remaining “reliability” arguments for NOPS are illusory. In this regard Joint Intervenors criticize ENO’s and the Advisors’ arguments that new gas-fired generation will (1) provide the potential to power to the S&WB Carrollton pumping plant if there is an islanding event, and (2) provide storm restoration and “black-start” capability to assist in returning service to customers as quickly as possible after extreme storm

²⁷⁶ Joint Intervenors’ Post-Hearing Brief at 55-56.

²⁷⁷ Joint Intervenors’ Post-Hearing Brief at 56.

²⁷⁸ Joint Intervenors’ Post-Hearing Brief at 56-58.

events or outages. According to Joint Intervenors, those arguments are speculative because ENO's and the Advisors' witnesses have not supplied any evidence demonstrating that these purported benefits will be realized;²⁷⁹ and

WHEREAS, Joint Intervenors note that Advisors' witness Phillip Movish testified that gas-fired generation located at Michoud could "potentially" provide power to the S&WB's Carrollton pumping plant in the event that the S&WB's generating capacity is impaired. Joint Intervenors argue that there is no evidence that the S&WB has even asked ENO to provide backup power for Carrollton with a new power plant. Joint Intervenors also argue that even if ENO does need to provide power to S&WB, ENO has failed to explain why the Company's Ninemile power plant, which is directly across the river from Carrollton, cannot provide generation support for the facility. Also, Joint Intervenors assert that ENO did not evaluate whether any less expensive alternative, such as installing a substation at Carrollton, could serve S&WB load more cheaply and reliably than the gas plant. Joint Intervenors also contend that, because S&WB recently installed its own quick-start emergency generator, it is not clear that the facility even has a need for black-start capability from ENO. Moreover, Joint Intervenors note that the purported benefit of serving the SW&B in emergencies does not apply to the CT Alternative as it lacks black-start capability;²⁸⁰ and

WHEREAS, Joint Intervenors argue that ENO's assertion that a local gas generating unit can help provide electric service restoration after events such as hurricanes is speculative and unsupported because ENO never conducted any modeling to determine how a gas plant, or any alternatives to a gas plant, would support the City's recovery from a major storm or would even be available during a hurricane event. According to Joint Intervenors, ENO ignores the fact that

²⁷⁹ Joint Intervenors' Post-Hearing Brief at 58.

²⁸⁰ Joint Intervenors' Post-Hearing Brief at 58-60.

a hurricane strong enough to produce major damage to the transmission system also poses a significant threat to any local generating units. Moreover, Joint Intervenors assert that Hurricane Gustav provides another example undermining the Company's assertion that generation is needed at Michoud to deal with storm impacts. According to Joint Intervenors, Hurricane Gustav caused extensive damage to the distribution system, resulting in the islanding of the DSG area and requiring ENO to take the Michoud units offline. Joint Intervenors state that despite the lack of any generation at Michoud, there was still sufficient generation, primarily from Ninemile Station, to power the DSG load pocket;²⁸¹ and

WHEREAS, Joint Intervenors assert that even if the proposed NOPS options could operate on their own following a storm, they could only supply enough power to serve a small part of ENO's normal load. Moreover, Joint Intervenors argue that the ability of a gas-burning generation unit to provide power to the City after a storm necessarily depends on the availability of natural gas supply. In contrast, according to Joint Intervenors, a solar installation is not subject to the availability of fuel;²⁸² and

WHEREAS, Joint Intervenors contend that while ENO pays lip service to the "black-start" capability of the RICE unit, it continues to argue that the more expensive, 226 MW CT that lacks black-start is the "best option" for ENO customers. According to Joint Intervenors, if the Company truly needed improved black-start capability, it would not continue to seek approval of the larger CT option;²⁸³ and

WHEREAS, Joint Intervenors argue that if ENO relies on existing generation to ensure service in the face of widespread storm outages and if it performs further upgrades to its

²⁸¹ Joint Intervenors' Post-Hearing Brief at 61.

²⁸² Joint Intervenors' Post-Hearing Brief at 62.

²⁸³ Joint Intervenors' Post-Hearing Brief at 62.

transmission lines, rather than deferring those upgrades to build a gas plant, it can also improve the system's ability to respond to outages and storm events;²⁸⁴ and

WHEREAS, the Advisors argue that the record is clear that ENO has a current and critical need for generation resources in Orleans Parish to assure reliability and avoid an unacceptable risk of cascading outages of long duration. That need exists today and will continue to exist until generation is constructed in New Orleans. Further, based on the evidence presented, all parties appear to be in agreement that ENO currently faces reliability risks since the deactivation of Michoud in 2016;²⁸⁵ and

WHEREAS, the Advisors state that since the deactivation of Michoud, all of the units ENO relies on for reliability are located outside Orleans Parish, and many of the existing units in the region are old and may soon be retired. The City is entirely dependent upon transmission lines to meet reliability requirements and demand;²⁸⁶ and

WHEREAS, the Advisors explain that New Orleans is located in the constrained DSG region of the power system. The DSG region is largely surrounded by water, it contains highly concentrated electrical loads that are largely reliant on local generation to maintain reliability, and has a limited import capability, making it a "load pocket."²⁸⁷ New Orleans is located in a geographical and electrical peninsula bordered by water on the north, east and south. Almost all electrical energy is imported into the City from the west, primarily through East Jefferson Parish via the transmission grid, while a small amount of electric energy is transported through the very limited transmission capability from the Slidell area over the open waters of Lake Pontchartrain. The existing transmission facilities serving the City traverse a limited set of viable transmission

²⁸⁴ Joint Intervenors' Post-Hearing Brief at 62-63, *citing* LanzaLotta-1 at 10:5-13.

²⁸⁵ Advisors' Post-Hearing Brief at 30, 40.

²⁸⁶ Advisors' Post-Hearing Brief at 30-31.

²⁸⁷ Advisors' Post-Hearing Brief at 30-31.

corridors across wetlands and generally poor soil conditions through an area heavily congested with industrial, commercial, and residential structures;²⁸⁸ and

WHEREAS, the Advisors point out that no party refuted the fact that the geography surrounding New Orleans limits the amount of transmission facilities available to serve the City; and

WHEREAS, the Advisors argue that without a local generation resource, the City in general, and New Orleans East in particular, is entirely dependent on the set of existing transmission lines situated in a relatively small geographical area, and the loss of even a portion of these transmission facilities delivering energy from the West into the City would likely prevent the Company from serving its entire load;²⁸⁹ and

WHEREAS, the Advisors explain that in the DSG region, the simultaneous loss of a generation resource and a transmission element often results in voltage and thermal constraints which cannot be mitigated without the commitment of another local unit, particularly since many of the generators in the region have long start-up times. Because of the unique configuration and system constraints, all DSG generating units, including Michoud when it was operational, are committed as “Voltage and Local Reliability” resources to ensure that enough capacity exists in the region to maintain reliability;²⁹⁰ and

WHEREAS, the Advisors state that the record shows that the deactivation of Michoud has left ENO with a critical need for generation in order to keep the system from collapsing in the event of certain contingencies, and without construction of incremental dispatchable local generation (*i.e.*, NOPS), the City and DSG region will experience a degradation in system reliability. New Orleans faces a risk of cascading outages with loss of electric load served from

²⁸⁸ Advisors’ Post-Hearing Brief at 31-32.

²⁸⁹ Advisors’ Post-Hearing Brief at 31-32.

²⁹⁰ Advisors’ Post-Hearing Brief at 32, 40.

most of ENO's substations, leaving 49,000 ENO customers without power for extended periods of time, particularly in New Orleans East;²⁹¹ and

WHEREAS, the Advisors state that the record demonstrates that ENO is at risk of being in violation of the standards set by NERC, and is presently at risk for two NERC contingencies in particular. Of greatest concern, ENO is at risk of a "P6" contingency, which involves loss of multiple transmission facilities;²⁹² and

WHEREAS, ENO's current solution to address the contingencies is load shedding, *i.e.*, deliberately curtailing service to a portion of its customers in order to prevent the collapse of the entire system;²⁹³ and

WHEREAS, the Advisors say that if NOPS is not approved, ENO will have to make extensive transmission upgrades in order to maintain system reliability and remain in compliance with NERC standards, but that there are serious constructability issues associated with any such construction of transmission.²⁹⁴ It would take longer to plan and implement transmission upgrades than to construct NOPS on a site that ENO already owns; there is a possibility that ENO would not be able to get the outages it would need to make the upgrades; and there is a serious risk of a P6 event occurring while the upgrade are being done because of the constraints on the system;²⁹⁵ and

WHEREAS, the Advisors remind the Council that at a recent UCTTC meeting, representatives from MISO reported on ongoing operational challenges of operating the grid in the DSG load pocket, emphasized the importance of having local generation in the City. MISO

²⁹¹ Advisors' Post-Hearing Brief at 32-33.

²⁹² Advisors' Post-Hearing Brief at 34-35, 40-41.

²⁹³ Advisors' Post-Hearing Brief at 35.

²⁹⁴ Advisors' Post-Hearing Brief at 35-37.

²⁹⁵ Advisors' Post-Hearing Brief at 36.

has confirmed ENO's own analyses of the long-term reliability risks it currently faces, including the possibility of long-duration cascading outages;²⁹⁶ and

WHEREAS, the Advisors also point out that DSM and solar do not resolve the reliability issue because at times these resources provide zero capacity, and so cannot be relied on for purposes of meeting NERC criteria;²⁹⁷ and

WHEREAS, the Advisors disagree with Air Products witness Mr. Dauphinais, who, without any support, evidence or substantive argument, asserts that ENO has not reasonably demonstrated there is a local thermal, voltage, reactive power or resource adequacy need for the CT Alternative. This contention, the Advisors state, is contrary to other witnesses, including Air Products witness Mr. Brubaker, who recognized a long-term capacity need and the present risk of cascading outages;²⁹⁸ and Joint Intervenor's witness Mr. Luckow, who, though he argues that the reliability need is overstated, nonetheless acknowledges that absent transmission reinforcements in the DSG load pocket area, there would be violations of transmission security;²⁹⁹ and

WHEREAS, the Advisors point out that while Joint Intervenor's witness Mr. Fagan argued that transmission reliability could be achieved by reinforcing existing transmission facilities,³⁰⁰ he admitted on cross-examination that when he prepared his testimony, he had not done any studies to determine the feasibility of outage scheduling for transmission lines into the ENO service area for the next 10 years, and that he has never planned or operated transmission in MISO South, so his speculation as to how easily transmission upgrades can be accomplished

²⁹⁶ Advisors' Post-Hearing Brief at 35.

²⁹⁷ Advisors' Post-Hearing Brief at 37.

²⁹⁸ Advisors' Post-Hearing Brief at 37.

²⁹⁹ Advisors' Post-Hearing Brief at 37-38.

³⁰⁰ Advisors' Post-Hearing Brief at 38-39.

appears to lack any foundation.³⁰¹ He also admitted upon cross-examination that in recommending a transmission-only option with reliance on the MISO capacity market to meet capacity needs, he was not familiar with and did not address or do any analysis of narrow constrained areas within MISO South;³⁰² and

WHEREAS, the Advisors note that Joint Intervenors' witness Dr. Stanton, similarly lacks experience in transmission planning or utility operations,³⁰³ and while she advocated focusing resources on improving ENO's distribution system, she admitted that she had not conducted any analysis of ENO's distribution system and agreed that investment in the distribution system is not a viable alternative to addressing ENO's capacity needs;³⁰⁴ and

WHEREAS, after evaluating all of the evidence in the record, the Council finds that there is no disagreement that since the deactivation of Michoud, ENO faces a serious reliability risk. The parties disagree over the appropriate method of addressing this risk, but no party has provided credible evidence that refutes the existence of the risk, or that calls into question the severity of the problem; and

WHEREAS, since the deactivation of Michoud, ENO is entirely dependent upon transmission lines to meet reliability requirements and demand, and all of the generating units ENO relies on for reliability are located outside Orleans Parish. Further, the geography of New Orleans and the surrounding DSG region is such that the reliability risks to ENO's system are exacerbated. New Orleans is a peninsula, bordered by water on the north, east and south. Almost all electrical energy is imported into the City from the West, primarily through East Jefferson Parish via the transmission grid, while a small amount of electric energy is transported

³⁰¹ Advisors' Post-Hearing Brief at 39, *citing* Hr'g Tr. 12/19/17, 32:3-15.

³⁰² Advisors' Post-Hearing Brief at 39, *citing* Hr'g Tr. 12/19/17, 31:10-19.

³⁰³ Advisors' Post-Hearing Brief at 39.

³⁰⁴ Advisors' Post-Hearing Brief at 39-40, *citing* Stanton-1 at 44:8-48-21 and Hr'g Tr. 12/21/17, 27:4-11.

through the very limited transmission capability from the Slidell area over the open waters. The DSG region contains highly concentrated electrical loads that are largely reliant on local generation to maintain reliability. Further, the region has limited import capability; and

WHEREAS, the Council agrees with ENO and the Advisors that without a local generation resource, the City is entirely dependent on the set of existing transmission lines situated in a relatively small geographical area. The loss of even a portion of these transmission facilities delivering energy from the West into the City would likely prevent the Company from serving its entire load. The Council finds that it is urgent to address ENO's reliability issue to prevent degradation in system reliability, leading to the risk of cascading outages that will leave 49,000 ENO customers without power for extended periods of time, particularly in New Orleans East; and

WHEREAS, the record demonstrates that without a corrective action plan, as ENO has proposed to develop NOPS, ENO would be in violation of the standards set by NERC, and is presently at risk for two NERC contingencies in particular. Of greatest concern, ENO is at risk of a "P6" contingency, which involves loss of multiple transmission facilities resulting in cascading outages;³⁰⁵ and

WHEREAS, ENO's current solution to address the contingencies, *i.e.*, load shedding, is not a viable long-term solution to the reliability issue, although the Council recognizes that in the short term, ENO may at times be forced to curtail service to a portion of its customers in order to prevent the collapse of the entire system;³⁰⁶ and

³⁰⁵ Advisors' Post-Hearing Brief at 34-35, 40-41.

³⁰⁶ Advisors' Post-Hearing Brief at 35.

WHEREAS, the record demonstrates that without the addition of local generation to ENO's system, ENO will have to make extensive transmission upgrades in order to maintain system reliability and remain in compliance with NERC standards; and

WHEREAS, no party has rebutted ENO's contention that there are significant, and possibly insurmountable challenges associated with any transmission construction, whether it involves upgrades to existing lines or construction of new facilities. No party has refuted ENO's claim that it would take longer to plan and implement transmission upgrades than to construct NOPS on a site that ENO already owns. No party has refuted that there is a real likelihood that ENO would not be able to get the outages it would need to make any upgrades, and even if it did, the upgrades could take many years to complete. No party has refuted ENO's assertion that there is a serious risk of a P6 event occurring while any upgrades are being done because of the constraints on the system. Opponents of NOPS who support a transmission-only solution acknowledged the challenges ENO would face if it were to attempt to construct new facilities, particularly challenges in obtaining rights of way; and

WHEREAS, MISO has validated ENO's analyses of the long-term reliability risks it currently faces, including the possibility of long-duration cascading outages, and has emphasized the importance of having local generation in New Orleans; and

WHEREAS, the Council notes that witnesses for opponents of NOPS have not done any studies that would support their alternative proposals or assertions that ENO has viable options other than NOPS to address the reliability issues. These witnesses have not conducted studies to determine the feasibility of outage scheduling for transmission lines into the ENO service area for the next 10 years; they have not planned or operated transmission in MISO South; they have

not conducted any analysis of ENO's system specifically to support their proposed alternatives. In some cases, they had never been to New Orleans prior to this case;³⁰⁷ and

WHEREAS, the Council strongly supports the addition of DSM, solar or other renewable resources, and increased efficiency measures to ENO's system. However, the Council recognizes that none of these solutions would fully resolve the critical reliability issue ENO and the City currently face. These resources cannot be counted on for reliability because at times they provide zero capacity. Further, the record indicates that these measures would not be sufficient to resolve the reliability problem; and

WHEREAS, in sum, the Council finds that ENO has conclusively demonstrated a critical and urgent reliability need; and

II. Whether either of ENO's choices of technology(ies) is in the public interest

WHEREAS, with respect to the two alternatives ENO has presented to the Council for consideration, the CT Alternative and the RICE Alternative, ENO argues that both alternatives are in the public interest;³⁰⁸ and

WHEREAS, the Joint Intervenors argue that neither alternative is in the public interest;³⁰⁹ and

WHEREAS, NOCS argues that the CT Alternative is not in the public interest and that the RICE Alternative shares many of the same infirmities, but if the Council chooses to authorize one of the two alternatives, it should be the RICE Alternative; and

WHEREAS, Air Products and the Advisors argue that the RICE Alternative is in the public interest, but the CT Alternative is not. Air Products also argues that while the

³⁰⁷ Advisors' Post-Hearing Brief at 38-40, *citing* Hr'g Tr. 12/19/17, 31:10-32:15; Hr'g Tr. 12/21/17, 11:19-22 and 27:4-11.

³⁰⁸ ENO Post-Hearing Brief at 85-92.

³⁰⁹ Joint Intervenors' Post-Hearing Brief at 63-92.

infrastructure for the entire RICE Alternative should be constructed, only five of the seven RICE units should be built at this time; and

A. Whether ENO's selection of a CT unit is in the public interest

WHEREAS, ENO argues that it has shown that the selection of the CT Alternative is in the public interest.³¹⁰ ENO states that its NOPS Project Team evaluated several different technologies, and the proposed CT unit was determined to be the better economic option for ENO's customers, considering the total relevant supply cost method, which included comparing fixed costs, variable production cost, MISO capacity purchase costs, and transmission.³¹¹ ENO argues that the proposed CT unit supports the Company's long-term planning objectives and is consistent with its supply role needs;³¹² and

WHEREAS, ENO argues that the CT Alternative, which consists of one Mitsubishi Hitachi Power Systems America 501 GAC CT unit that would provide approximately 226 MW (nominal) of summer generating capacity, is a turbine that other Entergy Operating Companies have purchased for the St. Charles, Lake Charles, and Montgomery County Power Stations.³¹³ ENO asserts that other Entergy Operating Companies have had positive prior experiences with Mitsubishi as a supplier of gas and steam turbines and received superior service;³¹⁴ and

WHEREAS, ENO argues that the CT Alternative fulfills both the capacity and reliability needs of ENO for the Company's full planning horizon, and that adding it will eliminate all grid reliability issues within the current 10-year planning horizon;³¹⁵ and

³¹⁰ ENO Post-Hearing Brief at 86.

³¹¹ ENO Post-Hearing Brief at 86.

³¹² ENO Post-Hearing Brief at 86.

³¹³ ENO Post-Hearing Brief at 86.

³¹⁴ ENO Post-Hearing Brief at 86.

³¹⁵ ENO Post-Hearing Brief at 87, *citing* Cureington-6 at 7 and 11, C. Long-2 at 9-10 and 13, and Direct Testimony and Exhibit of Philip Movish, Docket No. UD-16-02, at 43 (Nov. 20, 2017) ("Movish-1").

WHEREAS, ENO argues that on top of addressing the capacity and reliability needs, the CT will provide additional benefits, including: (1) avoiding costly and time-consuming transmission upgrades; (2) providing the capability to back up renewable resources when they are not available; (3) facilitating more load-serving capability and system restoration following extreme weather; (4) providing more of a hedge against congestion on the transmission system that tends to increase locational marginal pricing in the New Orleans Load Zone; (5) facilitating planned transmission and generation maintenance outages in the load pocket and mitigating the risk associated with unplanned outages; and (6) providing a quick-start, fast ramping resource capable of responding to real-time operational needs of the ENO system;³¹⁶ and

WHEREAS, ENO also asserts that the CT Alternative will produce significant economic benefits (hundreds of millions of dollars) in terms of new business sales, household earnings, and jobs in both the state and regional economies and provides a study of the economic impact of NOPS in support of this assertion;³¹⁷ and

WHEREAS, ENO argues that although the Company also proposed the RICE Alternative, and it recognizes that the Council must balance several factors to choose between the two options, the CT Alternative remains the best option for ENO's customers.³¹⁸ ENO argues that on a \$/kW basis, the CT Alternative has a lower supply cost than the RICE Alternative and that there are benefits that increase as the size of the generator increases, such as larger reliability margins, a greater hedge against market and supply risks and unit retirements in Amite South and DSG, and creating more reactive power and flexibility to take transmission outages;³¹⁹ and

³¹⁶ ENO Post-Hearing Brief at 87-88, *citing* Cureington-8 at 4.

³¹⁷ Rice-3 at 15:20-16:4; Rice-1, Ex. CLR-1 at ii.

³¹⁸ ENO Post-Hearing Brief at 88.

³¹⁹ ENO Post-Hearing Brief at 88.

WHEREAS, NOCS argues that, particularly in light of ENO's inability to show a need for 226 MW of additional generating capacity, the CT Alternative is not in the public interest.³²⁰ NOCS argues that even if ENO could show a need in the foreseeable future for 226 MW of additional generating capacity, the question still remains of whether CT technology is the best, most economical solution to meet such capacity need.³²¹ NOCS asserts that while ENO argues there are ancillary benefits to constructing the over-sized CT Alternative, such as ostensibly eliminating all NERC transmission reliability issues, it neglects to quantify any such ancillary benefits or to explain the relative value of the ancillary benefits to be provided by the CT Alternative as compared to the ancillary benefits to be provided by the RICE Alternative;³²² and

WHEREAS, NOCS argues that the choice of CT technology is not supported by ENO's own analyses of the optimal mix of generating resource technologies in the 2015 Final IRP, during which the AURORA modeling selected a CCGT resource in three of the four scenarios and a combination of solar and wind for the fourth scenario;³²³ and

WHEREAS, NOCS argues that given that it was neither identified as an optimal technology by the AURORA model, nor selected as the result of the IRP process or an RFP process, its excessive size and cost, and its disadvantages as compared to the RICE Alternative lead to the inescapable conclusion that ENO cannot prove the CT Alternative is in the public interest;³²⁴ and

WHEREAS, the Joint Intervenors argue that the CT Alternative is not in the public interest.³²⁵ The Joint Intervenors argue that the Council's resolution³²⁶ and the public interest

³²⁰ NOCS Post-Hearing Brief at 14.

³²¹ NOCS Post-Hearing Brief at 14.

³²² NOCS Post-Hearing Brief at 14-15.

³²³ NOCS Post-Hearing Brief at 15, *citing* Rogers-1 at 14:6-15:3.

³²⁴ NOCS Post-Hearing Brief at 15.

³²⁵ Joint Intervenors' Post-Hearing Brief at 63.

³²⁶ Joint Intervenors' Post-Hearing Brief at 63-64, *citing* Resolution No. R-17-100.

standard require consideration of a broad range of cost, environmental, and public health considerations.³²⁷ The Joint Intervenors argue that ENO has not met its burden of proving that NOPS is in the public interest of New Orleans citizens;³²⁸ and

WHEREAS, the Joint Intervenors argue that the Company has not proven a capacity need or a reliability need for the CT Alternative;³²⁹ and

WHEREAS, the Joint Intervenors argue that the CT Alternative is not the least-cost alternative and would cost ratepayers more than transmission and solar-powered solutions.³³⁰ The Joint Intervenors argue that upgrading New Orleans' transmission lines and installing utility-scale solar would be the economically preferred alternative.³³¹ They argue that ENO's case for the CT Alternative rests heavily on MISO capacity market prices approaching CONE, allowing New Orleans ratepayers to offset the relatively high construction costs of the CT Alternative with capacity sales revenues.³³² Joint Intervenors argue that ENO's assumption of a 16,000% increase in the MISO capacity market price by 2022 is unlikely to occur and is unreasonable.³³³ The Joint Intervenors argue that the monthly residential customer electric bill in the Transmission Alternative would be approximately 75% less than in the case of the CT Alternative;³³⁴ and

WHEREAS, the Joint Intervenors also argue that ENO failed to adequately assess the impacts of constructing a gas-fired plant on the environment, including increased air pollution,

³²⁷ Joint Intervenors' Post-Hearing Brief at 63-65.

³²⁸ Joint Intervenors' Post-Hearing Brief at 64.

³²⁹ Joint Intervenors' Post-Hearing Brief at 64.

³³⁰ Joint Intervenors' Post-Hearing Brief at 64.

³³¹ Joint Intervenors' Post-Hearing Brief at 65.

³³² Joint Intervenors' Post-Hearing Brief at 65.

³³³ Joint Intervenors' Post-Hearing Brief at 65-66, *citing* Direct Testimony and Exhibits of Dr. Elizabeth Stanton, Docket No. UD-16-02, at 21, Figure 8 (Oct. 16, 2017) (HSPM) ("Stanton-2"), Direct Testimony and Exhibits of Robert Fagan, Docket No. UD-16-02, at 4:4-5:9 (Oct. 16, 2017) (HSPM) ("Fagan-2"), Rogers-2 at 33:7-11; 36:6-37:15; Cureington-8, Ex. SEC-15 at 15.

³³⁴ Joint Intervenors' Post-Hearing Brief at 66.

subsidence, or flooding.³³⁵ The Joint Intervenors argue that the CT Alternative would employ a polluting technology that would place significant environmental burdens on predominately people of color and poor communities.³³⁶ The Joint Intervenors argue that the CT Alternative would create racially disproportionate environmental burdens on predominately African American and Vietnamese neighborhoods in New Orleans East and that it would release significant amounts of air pollution near homes and schools annually.³³⁷ The Joint Intervenors also argue that the CT Alternative would create significant flood risks that can impact the same surrounding neighborhoods which have yet to fully recover from the levee failure during Hurricane Katrina;³³⁸ and

WHEREAS, the Joint Intervenors argue that ENO's pollution estimates for the CT Alternative have not been confirmed by the LDEQ, and that they do not include the amounts of sulfuric acid or the types and amounts of toxins that would be discharged as water pollution.³³⁹ The Joint Intervenors argue that the ambient air quality will worsen with the CT Alternative's annual releases of approximately 2,000,000 pounds of air pollution;³⁴⁰ and

WHEREAS, the Joint Intervenors claim that ENO argues that the gas plant would meet the requirements for obtaining air permits and that this would cause air quality to worsen.³⁴¹ The Joint Intervenors argue that across Louisiana, the effects of poor air quality arise from permitted air pollution, and that air pollution causes cancer, impairs the function of the respiratory and cardiovascular systems and that "a regulatory standard and a guarantee of safety are not

³³⁵ Joint Intervenors' Post-Hearing Brief at 64-65.

³³⁶ Joint Intervenors' Post-Hearing Brief at 67.

³³⁷ Joint Intervenors' Post-Hearing Brief at 67-68.

³³⁸ Joint Intervenors' Post-Hearing Brief at 68.

³³⁹ Joint Intervenors' Post-Hearing Brief at 70.

³⁴⁰ Joint Intervenors' Post-Hearing Brief at 70.

³⁴¹ Joint Intervenors' Post-Hearing Brief at 70.

synonymous.”³⁴² Joint Intervenors argue that the CT Alternative will add to pollution and cause an increase in the risk of adverse health effects, especially for those who live within the most affected areas of the plant;³⁴³ and

WHEREAS, the Joint Intervenors argue that ENO’s preferred CT Alternative would continue groundwater withdrawals, adding to the risk of subsidence.³⁴⁴ The Joint Intervenors argue that ENO’s assertion that the CT Alternative would not exacerbate subsidence in New Orleans East ignores that the ground in New Orleans is naturally prone to subsidence and any human-driven action that causes subsidence will intensify something that is already known to be problematic, and that it would reduce natural recharge, and intensify natural subsidence.³⁴⁵ The Joint Intervenors’ witness Dr. Kolker testified that the subsidence issue is a serious issue that warrants independent engineering analysis;³⁴⁶ and

WHEREAS, the Joint Intervenors argue that the air pollutants from the CT Alternative would include particulate matter (both PM_{2.5} and PM₁₀), sulfur dioxide (“SO₂”), nitrogen oxides (“NO_x”), carbon monoxide (“CO”), greenhouse gases (“GHGs”) and volatile organic compounds (“VOCs”), and that for decades into the future the CT Alternative will increase the level of harmful pollutants emitted in New Orleans East communities, and the Council should reject the plant as contrary to the public interest in a safe and healthy New Orleans, particularly given ENO’s failure to review other reasonable alternatives;³⁴⁷ and

³⁴² Joint Intervenors’ Post-Hearing Brief at 71, *citing* Supplemental Direct Testimony and Exhibits of Dr. George Thurston, Docket No. UD-16-02, at 8 (Oct. 16, 2017) (“Thurston-2”), and *Johnson v. Orleans Parish School Board*, 975 So. 2d 678, 711 (La. App. 4th Cir. 2008).

³⁴³ Joint Intervenors’ Post-Hearing Brief at 71.

³⁴⁴ Joint Intervenors’ Post-Hearing Brief at 72-73.

³⁴⁵ Joint Intervenors’ Post-Hearing Brief at 73.

³⁴⁶ Joint Intervenors’ Post-Hearing Brief at 73.

³⁴⁷ Joint Intervenors’ Post-Hearing Brief at 74-75.

WHEREAS, the Joint Intervenors argue that ENO’s witnesses downplayed the harmful effect is of these pollutants, including the sharp increase in PM pollution from present levels.³⁴⁸ The Joint Intervenors reject the argument that it is relevant that the proposed CT Alternative will emit fewer pollutants than the previously-existing power plant on the same site. The Joint Intervenors also reject the argument that the net reduction in emissions will be sufficient to meet the minimum Clean Air Act (“CAA”) permitting requirements, because “[t]he Council is not bound by the CAA regulatory fiction that allows ENO to pretend that a significant increase in harmful pollutants is actually a decrease in those pollutants and find that the public interest requires a focus on the actual emissions from either gas plant;”³⁴⁹ and

WHEREAS, the Joint Intervenors argue that the anticipated emissions from the CT Alternative will not meet minimum federal standards because they will be significant enough to trigger the EPA’s specific requirements for emissions control and analysis;³⁵⁰ and

WHEREAS, the Joint Intervenors argue that the provision of the CAA that allows ENO to avoid more stringent review by netting the emissions from the old Michoud units against the proposed units prevents a proper evaluation of the anticipated emissions from the plant;³⁵¹ and

WHEREAS, the Joint Intervenors argue that air pollution causes decreased lung function, more frequent asthma symptoms, increased numbers of asthma and heart attacks, more frequent emergency department visits, additional hospital admissions, and increased numbers of deaths and a host of additional health impacts;³⁵² and

³⁴⁸ Joint Intervenors’ Post-Hearing Brief at 75.

³⁴⁹ Joint Intervenors’ Post-Hearing Brief at 74-75.

³⁵⁰ Joint Intervenors’ Post-Hearing Brief at 76-77.

³⁵¹ Joint Intervenors’ Post-Hearing Brief at 76.

³⁵² Joint Intervenors’ Post-Hearing Brief at 77-79, *citing* Direct Testimony and Exhibits of Dr. George Thurston, Docket No. UD-16-02, at 5-8, 10, and 25 (Jan. 6, 2017) (“Thurston-1”).

WHEREAS, the Joint Intervenors argue that the CT Alternative is not in the public interest because it would violate the Council’s policy on climate change.³⁵³ The Joint Intervenors argue that the Council has adopted a policy to reduce the City’s greenhouse gas emissions and pursue renewable energy and energy efficiency to address the problem and that the CT Alternative is counterproductive to those goals.³⁵⁴ The Joint Intervenors also argue that the CT Alternative would be counter to the City’s Climate Action for a Resilient New Orleans plan and strategy to reduce its greenhouse gas emissions by 50% by 2020 and to goal of 255 MW of solar by 2030;³⁵⁵ and

WHEREAS, the Joint Intervenors argue that ENO’s proposed CT Alternative would increase flood risks and could violate the City’s flood protection ordinance, and would conflict with the Federal Emergency Management Agency (“FEMA”) critical infrastructure guidance;³⁵⁶ and

WHEREAS, the Joint Intervenors argue that the CT Alternative is not in the public interest because it was selected outside of the public participation and IRP Process.³⁵⁷ The Joint Intervenors argue that the fact that the Council entered into a settlement agreement with ENO in a public FERC docket regarding the termination of the System Agreement that included the provision requiring ENO to explore 120 MW of new-build peaking generation in New Orleans pre-determined the positions that ENO and the Advisors would take in this proceeding and that the record in this case provides no alternative explanation for their positions.³⁵⁸ The Joint Intervenors speculate that the Settlement Agreement holds such strong sway over this proceeding

³⁵³ Joint Intervenors’ Post-Hearing Brief at 82-84.

³⁵⁴ Joint Intervenors’ Post-Hearing Brief at 82-84.

³⁵⁵ Joint Intervenors’ Post-Hearing Brief at 84-86.

³⁵⁶ Joint Intervenors’ Post-Hearing Brief at 87-88.

³⁵⁷ Joint Intervenors’ Post-Hearing Brief at 88.

³⁵⁸ Joint Intervenors’ Post-Hearing Brief at 89-90.

that it caused ENO and the Advisors to reject the least cost and reasonable alternatives to a gas plant, such as renewable and efficient energy systems, DSM, and increased electric capacity of the transmission system;³⁵⁹ and

WHEREAS, the Joint Intervenors argue that the Settlement Agreement substantially undermined the 2015 IRP process and that there is a lack of transparency in this docket regarding the Settlement Agreement because Council Resolutions No. R-16-332,³⁶⁰ R-16-506 and R-17-426 do not discuss it.³⁶¹ The Joint Intervenors argue that due process has been violated because there is no assurance that the prior Settlement Agreement does not in any way pre-determine the outcome of the decisions leading up to the one that is anticipated from the Council in this case.³⁶² The Joint Intervenors criticize the Council and the Advisors for failing to take action in this docket to “resolve the due process issues that arise from the prior agreement;”³⁶³ and

WHEREAS, the Advisors conclude that the CT Alternative is not in the public interest.³⁶⁴ While the Advisors believe it would fully address the identified reliability need over the entire length of the planning period, they argue it would also expose customers to significant economic risks because the capacity of the proposed CT unit far exceeds the capacity needs of the Company for most of the planning period.³⁶⁵ Further, the Advisors argue the Company’s analysis of the economics of the CT Alternative is heavily dependent upon its forecast that MISO capacity prices will escalate at an unprecedented rate that would allow ENO to earn significant revenues by selling the excess capacity into the MISO market in order to offset the costs of the

³⁵⁹ Joint Intervenors’ Post-Hearing Brief at 90.

³⁶⁰ Resolution No. R-16-332 (Aug. 11, 2016).

³⁶¹ Joint Intervenors’ Post-Hearing Brief at 91.

³⁶² Joint Intervenors’ Post-Hearing Brief at 91-92.

³⁶³ Joint Intervenors’ Post-Hearing Brief at 92.

³⁶⁴ Advisors’ Post-Hearing Brief at 44.

³⁶⁵ Advisors’ Post-Hearing Brief at 44.

CT Alternative to ratepayers.³⁶⁶ The Advisors argue that if ENO is incorrect in its forecast that MISO capacity prices will rise to unprecedented levels very quickly, those revenues will not materialize and New Orleans ratepayers will have to bear significantly greater costs than ENO's economic analysis predicts;³⁶⁷ and

WHEREAS, the Advisors explain that at the Advisors' request, ENO witness Cureington ran several economic analyses of the proposed alternatives for meeting the identified need.³⁶⁸ The Advisors state that they also requested that ENO run three requested portfolios to model certain assumptions advanced by the intervenors.³⁶⁹ The Advisors explain that the scenarios included portfolios with and without consideration of the Council's 2% DSM Goal, and with or without a variety of renewable resources. The Advisors state that the portfolios included the Business Plan 17 Update ("BP17U") forecast of load and commodity prices, 100 MW of solar, continuation of Energy Smart and full deployment of ENO's proposed AMI.³⁷⁰ Sensitivities were conducted using low and high gas prices and 60% of the MISO capacity price forecast. The results were then incorporated into the Total Relevant Supply Cost Analysis;³⁷¹ and

WHEREAS, the Advisors state that although it was requested that ENO use AURORA's capacity expansion model, ENO argued that the scope of the modeling did not allow that feature to be used. Instead, report the Advisors, ENO attempted to simulate the results of the capacity expansion feature.³⁷² Accordingly, the Advisors explain, ENO conducted AURORA modeling on four portfolios using inputs and assumptions requested by the Advisors.³⁷³ The Advisors

³⁶⁶ Advisors' Post-Hearing Brief at 44.

³⁶⁷ Advisors' Post-Hearing Brief at 44.

³⁶⁸ Advisors' Post-Hearing Brief at 44-47.

³⁶⁹ Advisors' Post-Hearing Brief at 45, *citing* Supplemental Testimony and Exhibits of Seth E. Cureington, Docket No. UD-16-02, at 31:18-33:11 (Nov. 18, 2016) ("Cureington-3").

³⁷⁰ Advisors' Post-Hearing Brief at 45, *citing* Cureington-5 at 27:1-29:8.

³⁷¹ Advisors' Post-Hearing Brief at 45, *citing* Cureington-5 at 27:1-29:8.

³⁷² Advisors' Post-Hearing Brief at 46, *citing* Cureington-3 at 31:18-33:11.

³⁷³ Advisors' Post-Hearing Brief at 46, *citing* Cureington-3 at 31:18-33:11.

state that the first portfolio (Case 3) evaluated the RICE, the second one (Case 3G) evaluated the CT,³⁷⁴ the third one (Case 4A) evaluated adding 100 MW solar, and the fourth one (Case 4B) evaluated adding 300 MW of wind.³⁷⁵ The Advisors state that all portfolios included the BP17U load forecast adjusted for the estimated impact of the 2% DSM Goal, the planned 100 MW of solar, and full deployment of AMI.³⁷⁶ The Advisors state that ENO also ran the same sensitivities using low and high gas prices and the 60% MISO price forecast.³⁷⁷ However, ENO argued that the requested portfolios included an assumption of attaining the 2% DSM Goal, which is not likely to be attainable, and would not be cost-effective, as demonstrated by the Navigant report;³⁷⁸ and

WHEREAS, in all scenarios, ENO witness Cureington concluded that the CT Alternative was more cost-effective than the RICE Alternative, and in most scenarios, was the most cost-effective option over-all;³⁷⁹ and

WHEREAS the Advisors disagree with ENO's economic analysis.³⁸⁰ Advisors' witness Rogers finds that the significant reduction in projected total load requirements since the 2015 Final IRP, where a 250 MW CT was selected as part of the preferred portfolio, would strongly suggest that 226 MW may be greater than the optimal size for the proposed peaking plant, on a capacity need basis;³⁸¹ and

WHEREAS, Advisors' witness Rogers explained that the primary risk in building a plant that offers excess capacity is that it leaves customers exposed to capacity price risks, and the

³⁷⁴ Advisors' Post-Hearing Brief at 46, *citing* Cureington-3 at 31:18-33:11.

³⁷⁵ Advisors' Post-Hearing Brief at 46, *citing* Cureington-3 at 31:18-33:11.

³⁷⁶ Advisors' Post-Hearing Brief at 46, *citing* Cureington-3 at 31:18-33:11.

³⁷⁷ Advisors' Post-Hearing Brief at 46, *citing* Cureington-3 at 31:18-33:11.

³⁷⁸ Advisors' Post-Hearing Brief at 46, *citing* Cureington-5 at 35:4-39:6.

³⁷⁹ Advisors' Post-Hearing Brief at 46, *citing* Cureington-5 at 28:4-10, 29:1-8, 33:13-35:3, 44:6-15, 45:3-9.

³⁸⁰ Advisors' Post-Hearing Brief at 48; Rogers-1 at 9:3-6.

³⁸¹ Advisors' Post-Hearing Brief at 48; Rogers-1 at 9:3-6.

greater the excess amount of capacity, the greater the exposure.³⁸² The Advisors explain that this means that if ENO's MISO capacity market price forecast is wrong, the outcome for New Orleans customers could be substantially different than what ENO sets forth.³⁸³ The Advisors question the assumptions underlying ENO's MISO capacity market price forecasts and have concerns that if ENO's projected capacity market prices do not materialize, ENO ratepayers could be exposed to significantly increased economic risks.³⁸⁴ The Advisors explain that witness Rogers concluded that ENO has not economically justified the CT Alternative because (i) ENO's economic modeling of the CT Alternative relies heavily on forecasted MISO capacity market revenues that he finds to be questionable and (ii) when employing his illustrative MISO capacity market prices, the CT Alternative and the RICE Alternative have roughly the same economic attractiveness;³⁸⁵ and

WHEREAS, Advisors' witness Mr. Rogers explains, historic MISO capacity prices have been significantly lower than the CONE that ENO uses to make its forecast of future MISO capacity prices.³⁸⁶ Mr. Rogers notes that ENO assumes as capacity supply in MISO approaches equilibrium with demand (which ENO projects in 2022) prices will go up to approximately the level of CONE.³⁸⁷ However, Mr. Rogers notes that while ENO's approach is generally based on the theory of supply and demand, that theory may not be applicable to capacity prices in MISO South.³⁸⁸ Mr. Rogers notes that in several instances it has been noted before FERC that prices in MISO's capacity auction have been consistently too low to attract new generation investments and that the market is not really the prime driver of entry or expansion decisions. Rather, the

³⁸² Advisors' Post-Hearing Brief at 48-49, Rogers-1 at 32:9-15.

³⁸³ Advisors' Post-Hearing Brief at 51.

³⁸⁴ Advisors' Post-Hearing Brief at 51.

³⁸⁵ Advisors' Post-Hearing Brief at 48-49. Vumbaco-1 at 24:19-25:3. Rogers-1 at 30:18-31:9, 32:16-33:4, 35:10-17, 36:9-10.

³⁸⁶ Advisors' Post-Hearing Brief at 52, *citing* Rogers-1 at 32:16-33:4.

³⁸⁷ Advisors' Post-Hearing Brief at 52, *citing* Rogers-1 at 35:10-17.

³⁸⁸ Advisors' Post-Hearing Brief at 52, *citing* Rogers-1 at 36:9-10.

Advisors explain, the states located in MISO depend on state resource planning efforts by regulated utilities to assure that their load serving entities (“LSEs”) have sufficient capacity to meet load.³⁸⁹ Thus, the Advisors conclude it is more reasonable to expect MISO capacity market prices to generally be below CONE except for in certain, specific circumstances.³⁹⁰ Building capacity in excess of ENO’s needs in relation to the capacity market exposes ratepayers to unnecessary risk associated with the known fixed costs of the CT Alternative as compared to unknown market prices for the excess capacity necessary to make those resource additions economic.³⁹¹ Mr. Rogers believes several adjustments need to be made to ENO’s economic analyses.³⁹² Once he adjusted for ENO’s inconsistent transmission upgrade investment information, used non-levelized results, and used a much lower MISO capacity price forecast, his analysis produced a different economic ranking than did ENO’s.³⁹³ Mr. Rogers’ analysis shows that if capacity prices do not escalate at the rapid pace that ENO predicts, then the Transmission Alternative becomes the least-cost alternative under a significant range of capacity market price forecasts;³⁹⁴ and

WHEREAS, the Advisors explain that the changing assumptions around the MISO capacity prices and other inputs have a significant impact on ratepayer bills.³⁹⁵ For example, ENO estimates the impact of the CT Alternative on the average residential monthly bill to be \$5.61.³⁹⁶ However, as Advisors’ witness Watson testifies, once the calculations are adjusted as

³⁸⁹ Advisors’ Post-Hearing Brief at 52, *citing* Rogers-1 at 36:10-38:6.

³⁹⁰ Advisors’ Post-Hearing Brief at 52, *citing* Rogers-1 at 38:7-15.

³⁹¹ Advisors’ Post-Hearing Brief at 52, *citing* Rogers-1 at 34:13-35:7.

³⁹² Advisors’ Post-Hearing Brief at 52, *citing* Rogers-1 at 39:1-42:4.

³⁹³ Advisors’ Post-Hearing Brief at 52, *citing* Rogers-1 at 39:1-42:4.

³⁹⁴ Advisors’ Post-Hearing Brief at 53, *citing* Rogers-1 at 43:1-45:11.

³⁹⁵ Advisors’ Post-Hearing Brief at 53.

³⁹⁶ Advisors’ Post-Hearing Brief at 53, *citing* Direct Testimony and Exhibits of Byron S. Watson, Docket No. UD-16-02, at 13:3-4 (Nov. 20, 2017) (“Watson-1”).

recommended by Mr. Rogers, the rate impact of the CT Alternative increases to \$7.33.³⁹⁷ By way of comparison, the expected impact of the Transmission Alternative decreases from \$6.49 under ENO's analysis to \$1.82, and the RICE Alternative decreases from \$7.19 to \$6.91;³⁹⁸ and

WHEREAS, the Advisors acknowledge that the CT Alternative would fully mitigate the transmission reliability need identified by ENO and confirmed by the Advisors' own analysis;³⁹⁹ nevertheless, the Advisors urge that the CT is not in the public interest because it would result in a significant excess of capacity and subject ENO's customers to an unacceptable risk of exposure to unpredictable MISO capacity market prices, and the CT does not have black-start capability.⁴⁰⁰ It has a small emergency diesel generator to supply vital auxiliary loads in the event of a complete power loss, but the diesel generator is too small to have black-start capability;⁴⁰¹ and

WHEREAS, ENO witness Charles Long explains that ENO's current black-start plan involves a cranking route that begins with restoration of power from the Waterford Unit 4 black-start resource.⁴⁰² Once the Waterford resources are energized those resources would then be used to continue restoration of power along the Waterford-Ninemile transmission corridor and on to Michoud to bring power into New Orleans;⁴⁰³ and

WHEREAS, ENO's current black-start plan is dependent on lines outside of ENO's control.⁴⁰⁴ If the transmission grid anywhere along the 40-mile path from Waterford to New Orleans were damaged, ENO's ability to provide electric service to ENO customers would be

³⁹⁷ Advisors' Post-Hearing Brief at 53, *citing* Watson-1 at 15, Table 5.

³⁹⁸ Advisors' Post-Hearing Brief at 53.

³⁹⁹ Advisors' Post-Hearing Brief at 58; Movish-1 at 20:16-17; C. Long-2 at 2:8-13, 13:7-8; Vumbaco-1 at 21:8-11; Hr'g Tr. 12/15/17, 124:22-24.

⁴⁰⁰ Advisors' Post-Hearing Brief at 58-59; Hr'g Tr. 12/15/17, 230:17-231:3.

⁴⁰¹ Advisors' Post-Hearing Brief at 58 *citing* Movish-1 at 6:14-15.

⁴⁰² Advisors' Post-Hearing Brief at 59, *citing* C. Long-2 at 28:10-18; C. Long-3 at 31:14-19.

⁴⁰³ Advisors' Post-Hearing Brief at 59, *citing* C. Long-2 at 28:10-29:2; C. Long-3 at 31:15-17.

⁴⁰⁴ C. Long-3 at 31:17-18, 20-21.

impaired.⁴⁰⁵ Further, ENO has not performed studies demonstrating the feasibility of black-starting the CT Alternative unit with other generating resources in DSG;⁴⁰⁶ and

WHEREAS, the Advisors observe that the Joint Intervenors also oppose the CT Alternative on environmental grounds.⁴⁰⁷ However, the Advisors conclude that ENO has entered substantial evidence into the record that the CT Alternative will have a significantly reduced impact compared to the prior units at the Michoud site, that ENO has committed to complying with all applicable environmental laws and regulations and that ENO has taken steps to mitigate any potential risk of flooding;⁴⁰⁸ and

WHEREAS, the Advisors explain that ENO submitted a technical report into the record dated November 16, 2016 prepared by C-K Associates, LLC and Losonsky & Associates, Inc. (“C-K Report”) which addresses the evaluation of groundwater withdrawal and air quality associated with the proposed CT Alternative.⁴⁰⁹ The Advisors state that the C-K Report was developed to address concerns raised and to understand how the proposed NOPS might impact subsidence and air quality in New Orleans East;⁴¹⁰ and

WHEREAS, the Advisors state that the C-K Report also concludes that the CT Alternative’s proposed groundwater withdrawal rate of 96 gallons per minute (“gpm”) is “relatively low” and will not contribute to subsidence in New Orleans East.⁴¹¹ The Advisors state that the report finds by way of comparison, in 1983 there were approximately 200 wells in the Gonzales-New Orleans aquifer along the Mississippi River from St. Charles to St. Bernard

⁴⁰⁵ Movish-1 at 38:21-22.

⁴⁰⁶ Advisors’ Post-Hearing Brief, *citing* Movish-1 at 38:1-3, 39:1-3.

⁴⁰⁷ Advisors’ Post-Hearing Brief at 53.

⁴⁰⁸ Advisors’ Post-Hearing Brief at 53.

⁴⁰⁹ Advisors’ Post-Hearing Brief at 53, *citing* Technical Report - Evaluation of Groundwater Withdrawal and Air Quality, C-K Associates, LLC and Losonsky & Associates, Inc. (“C-K Report” or “Report”) attached to the Supplemental Direct Testimony of Jonathan E. Long, Ex. JEL-6 (Nov. 18, 2016) (J. Long-3”).

⁴¹⁰ Advisors’ Post-Hearing Brief at 54, *citing* J. Long-3, Ex. JEL-6 at 1.

⁴¹¹ Advisors’ Post-Hearing Brief at 54, *citing* J. Long-3, Ex. JEL-6 at 1.

Parishes, roughly half of which had flow rates in the range of 1,000 to 2,000 gpm.⁴¹² The Advisors state that the report concludes that drawdown calculations for the CT Alternative predict a maximum drawdown over a 10-year period of about one foot near the NOPS pumping well, diminishing to half of a foot or less at a distance of several thousand feet away, and one quarter foot or less at a distance of two miles from the well.⁴¹³ The Advisors note that the C-K Report explains that these calculations were performed using the most conservative assumption that the CT Alternative will operate 24 hours a day, 365 days a year;⁴¹⁴ and

WHEREAS, an additional report,⁴¹⁵ developed and prepared by CB&I Governmental Solutions, Inc. (“CB&I Report”) and submitted into evidence in this proceeding by ENO, also reached the same conclusions as those reached in the C-K Report;⁴¹⁶ and

WHEREAS, the Advisors agree that based on the evidence in the record, the groundwater withdrawal associated with the proposed CT Alternative is unlikely to exacerbate subsidence or cause damage to infrastructure in New Orleans East.⁴¹⁷ The Advisors find that ENO presented expert testimony that is well supported by two detailed studies containing site specific analysis and calculations that also provided historical comparisons to past groundwater usage.⁴¹⁸ The Advisors conclude that the significantly decreased expected pumping rates for the CT Alternative reduce the potential for any additional subsidence that may be attributable to groundwater withdrawal;⁴¹⁹ and

⁴¹² Advisors’ Post-Hearing Brief at 54, *citing* J. Long-3, Ex. JEL-6 at 11.

⁴¹³ Advisors’ Post-Hearing Brief at 55, *citing* Supplemental and Amending Direct Testimony and Exhibits of Dr. George Losonsky, Docket No. UD-16-02, at 13:16-19 (July 6, 2017) (“Losonsky-1”).

⁴¹⁴ Advisors’ Post-Hearing Brief at 55, *citing* Losonsky-1 at 13:14-21.

⁴¹⁵ Advisors’ Post-Hearing Brief at 54 n.238, *citing* Evaluation of Proposed Groundwater Withdrawals and Subsidence Entergy New Orleans Power Station, CB&I Governmental Solutions, Inc. (June 16, 2017) (“CB&I Report”) marked as Exhibit GL-3 and attached to Losonsky-1.

⁴¹⁶ Advisors’ Post-Hearing Brief at 54, *citing* Losonsky-1 at 17:19-22.

⁴¹⁷ Advisors’ Post-Hearing Brief at 62.

⁴¹⁸ Advisors’ Post-Hearing Brief at 62-63.

⁴¹⁹ Advisors’ Post-Hearing Brief at 62.

WHEREAS, the Advisors note that the C-K Report also contains an evaluation of the potential air emissions associated with the operation of NOPS. The C-K Report concluded that the “emissions from the proposed [CT Alternative] will result from combustion of clean burning natural gas; in no case, will the emissions cause air quality to exceed regulatory standards, which are protective of human health and the environment;”⁴²⁰ and

WHEREAS, the Advisors report that according to ENO witness Bliss M. Higgins, the CT Alternative would result in a substantial decrease in permitted emissions for NOPS as compared to the currently permitted Michoud Power Plant.⁴²¹ The Advisors state that Higgins explains that the EPA sets federal air quality standards, formally known as National Ambient Air Quality Standards (“NAAQS”), to protect public health and the environment,⁴²² and does so with an adequate margin of safety.⁴²³ The Advisors point out that Ms. Higgins also explains that these standards are expressed as an allowable concentration of pollution in the air. The Advisors note that the C-K Report compared the results of air dispersion modeling for the CT Alternative to the NAAQS and concluded that the CT Alternative is at least 96% below the NAAQS for all modeled chemicals and that personal ground-level exposure due to the proposed emissions will be well below the applicable air standards.⁴²⁴ The Advisors state that according to ENO, these conclusions reached in the C-K Report demonstrate that the CT Alternative would not result in significant adverse air quality effects;⁴²⁵ and

⁴²⁰ Advisors’ Post-Hearing Brief at 55-56, *citing* J. Long-3, Ex. JEL-6 at 1.

⁴²¹ Advisors’ Post-Hearing Brief at 56, *citing* Supplemental and Amending Direct Testimony and Exhibits of Bliss M. Higgins, Docket No. UD-16-02, at 17:32-33 (July 6, 2017) (“Higgins-1”).

⁴²² Advisors’ Post-Hearing Brief at 57, *citing* Higgins-1 at 32:5-6.

⁴²³ Advisors’ Post-Hearing Brief at 57; *see also*, Revised Rebuttal Testimony of Bliss Higgins, Docket No. UD-16-02, at 3:14-16 (Nov. 17, 2017) (“ENO-2”).

⁴²⁴ Advisors’ Post-Hearing Brief at 57; *see also*, ENO-2 at 14:3-6.

⁴²⁵ Advisors’ Post-Hearing Brief at 57; *see also*, ENO-2 at 14:6-8.

WHEREAS, the Advisors have reviewed the C-K Report and agree that the CT Alternative would result in a substantial decrease in permitted emissions for NOPS as compared to the permitted emissions of the prior Michoud units;⁴²⁶ and

WHEREAS, the Council declines to find that the CAA is a “regulatory fiction,”⁴²⁷ as is urged by the Joint Intervenors,⁴²⁸ nor will the Council find that the process set forth under the CAA for review of air permit applications is insufficient; and

WHEREAS, the Council observes that the EPA and LDEQ have jurisdiction over the environmental impacts of the proposed plant. While the Joint Intervenors criticize the applicable laws and permitting processes as not providing sufficient environmental protection to the citizens of New Orleans, the Council finds that they do not offer any evidence as to what level of emissions or environmental harm could be allowed without negative impact to New Orleans, and, thus, the Council has no record before it upon which it can base a decision to impose a new, additional environmental standard on ENO. Nor do the Joint Intervenors explain to whom such an additional standard should be applied – whether to all sources of such emissions in the City or whether only to ENO and why. Faced with the lack of any such evidence in the record, the Council declines to adopt new environmental standards in this case, and finds that it will be sufficient to require ENO to comply with all existing relevant environmental laws and regulations and to demonstrate its compliance to the Council on an ongoing basis; and

WHEREAS, the Council takes notice of the evidence in the record that the CT would fully mitigate ENO’s transmission reliability need over the planning period; however the Council believes that the proposed size of the facility is excessive given ENO’s load forecast, and that it would subject New Orleans customers to the risk of exposure to unpredictable MISO capacity

⁴²⁶ Advisors’ Post Hearing Brief at 64-65.

⁴²⁷ Joint Intervenors’ Post-Hearing Brief at 75.

⁴²⁸ Joint Intervenors’ Post-Hearing Brief at 74-75.

market revenues. As the Advisors have demonstrated, if ENO's highly optimistic predictions about prices in the MISO capacity market prove incorrect, ENO will not be able to offset a sufficient amount of costs to make the CT economic for ratepayers; and

WHEREAS, the Council also has serious misgivings about the CT unit's lack of black-start capability. While a local generating unit in New Orleans would provide important reliability benefits for the City and the DSG region, given New Orleans' vulnerability to powerful storms and its reliance on distant generating units and 40 miles of transmission facilities, including over open water, to restore power to the City in the event of an outage, the value of local, on-site black-start generation to support the City's critical facilities and speed up storm restoration cannot be understated; and

WHEREAS, for the reasons set forth above, the Council finds that the CT Alternative is not in the public interest; and

B. Whether ENO's selection of a RICE unit is in the public interest

WHEREAS, ENO argues that it has also shown that the RICE Alternative is in the public interest and is a reasonable alternative to the selection of the CT Alternative to provide needed capacity and reliability benefits to ENO's customers.⁴²⁹ ENO explains that the RICE Alternative would consist of seven Wärtsilä 18V50SG reciprocating internal combustion engines, and that it engaged WorleyParsons, a qualified and respected engineering firm, to conduct a study regarding the Company's potential options for a smaller resource in the 100-130 MW range, and their analysis indicated that in that size range, the RICE Alternative had the lowest levelized cost of electricity on a \$/MWh basis of the five technologies considered, low water

⁴²⁹ ENO Post-Hearing Brief at 88.

usage, a low emissions profile, the ability to support renewable resources, and black-start capability;⁴³⁰ and

WHEREAS, ENO argues that the RICE Alternative, like the CT Alternative, provides capacity and reliability benefits to ENO customers.⁴³¹ ENO states that the RICE Alternative addresses ENO's overall capacity need in the first 10 years of the planning horizon and mitigates exposure to market and supply related risks, and that it addresses many of the reliability concerns by preventing the risk of cascading outages.⁴³² ENO states that although additional transmission investment may be needed, potential overloads are relatively minor and not anticipated to be an issue until 2027, which provides the Company time to determine whether it should move forward with transmission upgrades or consider an additional RICE unit;⁴³³ and

WHEREAS, ENO explains that unlike the CT Alternative, the RICE Alternative can start and achieve full load in a very short period of time and can start and stop multiple times in a single day, which is a highly desirable option in a peaking or emergency situation.⁴³⁴ ENO argues that this also helps to support renewable resources by providing generation when renewable resources are not available;⁴³⁵ and

WHEREAS, ENO argues that the RICE Alternative's ability to black-start, *i.e.* start up under its own power without a backfeed of power from the electric grid, can support storm restoration after a major outage or storm event and provide a source of power to ENO's critical loads in the event of an outage, which is invaluable;⁴³⁶ and

⁴³⁰ ENO Post-Hearing Brief at 89, *citing* Supplemental and Amending Direct Testimony and Exhibits of Jonathan E. Long, Docket No. UD-16-02, at 1, 6-7, and 10 (July 6, 2017) (HSPM) ("J. Long-5").

⁴³¹ ENO Post-Hearing Brief at 89.

⁴³² ENO Post-Hearing Brief at 89, *citing* Cureington-6 at 12 and C. Long-2 at 13.

⁴³³ ENO Post-Hearing Brief at 89.

⁴³⁴ ENO Post-Hearing Brief at 90, *citing* J. Long-5 at 12.

⁴³⁵ ENO Post-Hearing Brief at 90, *citing* J. Long-5 at 12.

⁴³⁶ ENO Post-Hearing Brief at 90-91, *citing* J. Long-5 at 13, Movish-1 at 4-5, and Rogers-2 at 51.

WHEREAS, Air Products states that it supports the construction of four or five RICE units at this point in time as necessary to cover ENO's current capacity shortfall, and to provide an acceptable level of reliability to its customers.⁴³⁷ Air Products states that construction of a RICE facility is clearly in the public interest because of the reliability need for new generation within the City of New Orleans.⁴³⁸ Air Products concludes that construction of a RICE facility would serve the public convenience and necessity, and is in the public interest, and therefore is prudent.⁴³⁹ Further, Air Products argues, it is prudent and just and reasonable within the parameters of the *City of Plaquemine v. the Louisiana Public Service Commission*, 280 So. 2d 440 (1973) and *Federal Power Commission v. Hope Natural Gas Company*, 320 U.S. 591, 660 (1944) and a series of cases citing that decision;⁴⁴⁰ and

WHEREAS, ENO argues that Air Products' suggestion that ENO consider adding fewer than seven RICE units at this time, but construct the infrastructure necessary to permit addition of the remaining units if future circumstances support adding more capacity is not justified or in the interest of ENO's customers.⁴⁴¹ ENO argues that installing fewer than seven units will cost more on a \$/kW basis than the seven-unit plant will cost, and it is not clear that the costs of mobilizing contractors to the site for a second time in the future and obtaining any necessary regulatory approvals would support delaying the installation of two or three units from an economic standpoint.⁴⁴² ENO states that there are economies of scale that come with installing seven RICE units now, and that fewer RICE units would not provide the needed reliability

⁴³⁷ Air Products Post-Hearing Brief at 12

⁴³⁸ Air Products Post-Hearing Brief at 14.

⁴³⁹ Air Products Post-Hearing Brief at 14.

⁴⁴⁰ Air Products Post-Hearing Brief at 14.

⁴⁴¹ ENO Post-Hearing Brief at 91, *citing* Brubaker-3 at 3-4.

⁴⁴² ENO Post-Hearing Brief at 91, *citing* Cureington-8 at 57-58; and Hr'g Tr. 12/18/17, 129, 132-33. The Council notes that ENO's brief refers to \$/kWh while Mr. Cureington's testimony refers to \$/kW.

benefits of seven RICE units.⁴⁴³ ENO also points out that Air Products' witness Mr. Brubaker's testimony and observations were based on ENO's capacity position and not local reliability benefits as he admitted at the hearing.⁴⁴⁴ ENO argues that ENO's witness Charles Long testified that reducing the number of RICE units to five would leave ENO with insufficient capacity to address reliability concerns, and that mitigating reliability concerns is "borderline" with the 128 MW provided by seven RICE units.⁴⁴⁵ ENO argues further that it anticipates having a capacity shortfall of 248 MW by 2036, meaning that ENO will ultimately need the full 128 MW of capacity that seven units would provide, and that its needs will increase if existing legacy units in ENO's portfolio deactivate earlier than expected or if load increases more than projected;⁴⁴⁶ and

WHEREAS, NOCS argues that ENO's selection of the RICE Alternative suffers the same infirmities as its selection of the CT Alternative, namely (1) ENO's failure to conduct an RFP; and that (2) the unit was not selected as a result of the optimization process of the 2015 Final IRP.⁴⁴⁷ NOCS concludes that ENO's manner of selecting the NOPS project was untethered from any reasonable resource selection process, thumbs its nose at the Council's mandated IRP process, and flies in the face of prudent resource planning principles;⁴⁴⁸ and

WHEREAS, NOCS states that it understands that the City Council may wish to approve new generating capacity within the City of New Orleans to enhance the reliability of the transmission system serving ENO's customers and that in the event the Council approves any

⁴⁴³ ENO Post-Hearing Brief at 91, *citing* Hr'g Tr. 12/15/17, 225.

⁴⁴⁴ ENO Post-Hearing Brief at 91-92, *citing* In re. Supplemental and Amending Application of Entergy New Orleans, Inc., Hearing Transcript, Docket No. UD-16-02 (Dec. 20, 2017), 175-176 ("Hr'g Tr. 12/20/17").

⁴⁴⁵ ENO Post-Hearing Brief at 92, *citing* Hr'g Tr. 12/15/17, 225.

⁴⁴⁶ ENO Post-Hearing Brief at 92, *citing* Cureington-8 at 58.

⁴⁴⁷ NOCS Post-Hearing Brief at 16.

⁴⁴⁸ NOCS Post-Hearing Brief at 16.

new generating resource for ENO, it should only approve the RICE Alternative, and not the CT Alternative,⁴⁴⁹ and

WHEREAS, NOCS notes that the RICE Alternative is less expensive than the CT Alternative, but that ENO chose to forego generating resource alternatives that were even less expensive than the RICE Alternative and that this should not be lost on the Council when addressing cost recovery for the NOPS Project.⁴⁵⁰ NOCS believes that placing a cap on the cost of the NOPS project that may be recovered from ratepayers to protect them from cost overruns and/or escalations in construction costs due to factors beyond their control would be prudent.⁴⁵¹ NOCS argues that given the restrictions on the contract prices for constructing either version of the NOPS Project, ENO should not be opposed to a cap on cost recovery in the amount of such caps currently included in the Engineer, Procure, and Construct (“EPC”) contracts;⁴⁵² and

WHEREAS, NOCS states that from an operational standpoint, the RICE Alternative possesses certain attributes that are superior to those of the CT Alternative: (1) it is more flexible and scalable from a dispatch perspective; (2) it possesses a better heat rate; (3) it will include black-start capability; (4) it will utilize far less groundwater than the CT Alternative; and (5) it will provide greater ability to support renewable resources than the CT Alternative.⁴⁵³ Finally NOCS notes that the RICE Alternative would resolve nearly all transmission reliability concerns such that there would only be very minor overloading on the transmission system in year 2027,⁴⁵⁴ and

⁴⁴⁹ NOCS Post-Hearing Brief at 16-17.

⁴⁵⁰ NOCS Post-Hearing Brief at 17.

⁴⁵¹ NOCS Post-Hearing Brief at 17.

⁴⁵² NOCS Post-Hearing Brief at 17-18.

⁴⁵³ NOCS Post-Hearing Brief at 18, *citing* Rogers-1 at 46:15-47:18, J. Long-5 at 11:20-13:19, Rice-3 at 10:5-9, 12:16-20.

⁴⁵⁴ NOCS Post-Hearing Brief at 19.

WHEREAS, the Joint Intervenors argue that the RICE Alternative is not in the public interest.⁴⁵⁵ The Joint Intervenors argue that the Council’s Resolution No. R-17-100 and the public interest standard require consideration of a broad range of cost, environmental, and public health considerations.⁴⁵⁶ The Joint Intervenors argue that ENO has not met its burden of proving that NOPS is in the public interest of New Orleans citizens;⁴⁵⁷ and

WHEREAS, the Joint Intervenors argue that the Company has not proven a capacity need or a reliability need for the RICE Alternative;⁴⁵⁸ and

WHEREAS, the Joint Intervenors argue that the RICE Alternative is also not the least-cost alternative and would cost ratepayers more than transmission and solar-powered solutions.⁴⁵⁹ The Joint Intervenors argue that upgrading New Orleans’ transmission lines and installing utility-scale solar would be the economically preferred alternative.⁴⁶⁰ They argue that ENO’s case for the RICE Alternative rests heavily on MISO capacity market prices approaching CONE, allowing New Orleans ratepayers to offset the relatively high construction costs of the RICE Alternative with capacity sales revenues.⁴⁶¹ Joint Intervenors argue that ENO’s assumption of a 16,000% increase in the MISO capacity market price by 2022 is unlikely to occur and is unreasonable.⁴⁶² The Joint Intervenors argue that the Advisors’ assessment that the cost savings for the transmission plus solar is modest, and on balance, should be overcome by the other collateral benefits of the RICE units, ignores the many detrimental effects of installing the

⁴⁵⁵ Joint Intervenors’ Post-Hearing Brief at 63.

⁴⁵⁶ Joint Intervenors’ Post-Hearing Brief at 63-65.

⁴⁵⁷ Joint Intervenors’ Post-Hearing Brief at 64.

⁴⁵⁸ Joint Intervenors’ Post-Hearing Brief at 64.

⁴⁵⁹ Joint Intervenors’ Post-Hearing Brief at 64.

⁴⁶⁰ Joint Intervenors’ Post-Hearing Brief at 65.

⁴⁶¹ Joint Intervenors’ Post-Hearing Brief at 65.

⁴⁶² Joint Intervenors’ Post-Hearing Brief at 65-66, *citing* Direct Testimony and Exhibits of Dr. Elizabeth Stanton, Docket No. UD-16-02, at 21, Figure 8 (Oct. 16, 2017) (HSPM) (“Stanton-2”), Direct Testimony and Exhibits of Robert Fagan, Docket No. UD-16-02, at 4:4-5:9 (Oct. 16, 2017) (HSPM) (“Fagan-2”), Rogers-2 at 33:7-11; 36:6-37:15; Cureington-8, Ex. SEC-15 at 15.

RICE units including air pollution, increased risk of subsidence and flooding, and adverse impacts on the solar and energy efficiency caused by over-supply of generation;⁴⁶³ and

WHEREAS, the Joint Intervenors argue that ENO failed to adequately assess the impacts of constructing a gas-fired plant on the environment, including increased air pollution, subsidence, or flooding.⁴⁶⁴ The Joint Intervenors argue that the RICE Alternative would employ a polluting technology that would place significant environmental burdens on predominately people of color and poor communities.⁴⁶⁵ The Joint Intervenors argue that the RICE Alternative would create racially disproportionate environmental burdens on predominately African American and Vietnamese neighborhoods in New Orleans East and that it would release annually significant amounts of air pollution near homes and schools.⁴⁶⁶ The Joint Intervenors also argue that the RICE Alternative would create significant flood risks that can impact the same surrounding neighborhoods which have yet to fully recover from the levee failure during Hurricane Katrina;⁴⁶⁷ and

WHEREAS, the Joint Intervenors argue that ENO's pollution estimates for the RICE Alternative have not been confirmed by the LDEQ, and that they do not include the amounts of sulfuric acid or the types and amounts of toxins that would be discharged as water pollution.⁴⁶⁸ The Joint Intervenors argue that the ambient air quality will worsen with the RICE units' annual releases of approximately 1,000,000 pounds of air pollution;⁴⁶⁹ and

WHEREAS, the Joint Intervenors claim that ENO argues that the gas plant would meet the requirements for obtaining air permits; but Joint Intervenors claim this is insufficient and that

⁴⁶³ Joint Intervenors' Post-Hearing Brief at 66.

⁴⁶⁴ Joint Intervenors' Post-Hearing Brief at 64-65.

⁴⁶⁵ Joint Intervenors' Post-Hearing Brief at 67.

⁴⁶⁶ Joint Intervenors' Post-Hearing Brief at 67-68.

⁴⁶⁷ Joint Intervenors' Post-Hearing Brief at 68.

⁴⁶⁸ Joint Intervenors' Post-Hearing Brief at 70.

⁴⁶⁹ Joint Intervenors' Post-Hearing Brief at 70.

air quality will worsen.⁴⁷⁰ The Joint Intervenors argue that across Louisiana, the effects of poor air quality arise from permitted air pollution, and that air pollution causes cancer, impairs the function of the respiratory and cardiovascular systems and that “a regulatory standard and a guarantee of safety are not synonymous.”⁴⁷¹ Joint Intervenors argue that the RICE Alternative will add to pollution and cause an increase in the risk of adverse health effects, especially for those who live within the most affected areas around the plant;⁴⁷² and

WHEREAS, the Joint Intervenors argue that the air pollutants from the RICE Alternative would include particulate matter (both PM_{2.5} and PM₁₀), sulfur dioxide (SO₂), nitrogen oxides (NO_x), carbon monoxide (CO), greenhouse gases (GHGs) and volatile organic compounds (VOCs), and that for decades into the future the RICE Alternative will increase the level of harmful pollutants emitted in New Orleans East communities, and the Council should reject the plant as contrary to the public interest in a safe and healthy New Orleans, particularly given ENO’s failure to review other reasonable alternatives;⁴⁷³ and

WHEREAS, the Joint Intervenors argue that ENO’s witnesses downplayed the harmful effects of these pollutants, including the sharp increase in PM pollution from present levels.⁴⁷⁴ The Joint Intervenors reject the argument that it is relevant that the proposed RICE Alternative will emit fewer pollutants than the previously-existing power plant on the same site. The Joint Intervenors also reject the argument that the net reduction in emissions will be sufficient to meet the minimum CAA permitting requirements, because “[t]he Council is not bound by the CAA regulatory fiction that allows ENO to pretend that a significant increase in harmful pollutants is

⁴⁷⁰ Joint Intervenors’ Post-Hearing Brief at 70.

⁴⁷¹ Joint Intervenors’ Post-Hearing Brief at 71, citing *Thurston-2* at 8, and *Johnson v. Orleans Parish School Board*, 975 So. 2d at 711.

⁴⁷² Joint Intervenors’ Post-Hearing Brief at 71.

⁴⁷³ Joint Intervenors’ Post-Hearing Brief at 74-75.

⁴⁷⁴ Joint Intervenors’ Post-Hearing Brief at 75.

actually a decrease in those pollutants and find that the public interest requires a focus on the actual emissions from either gas plant;”⁴⁷⁵ and

WHEREAS, the Joint Intervenors argue that the anticipated emissions from the RICE Alternative will not meet minimum federal standards because they will be significant enough to trigger the EPA’s specific requirements for emissions control and analysis;⁴⁷⁶ and

WHEREAS, the Joint Intervenors argue that the provision of the CAA that allows ENO to avoid more stringent review by netting the emissions from the old Michoud units against the proposed units prevents a proper evaluation of the anticipated emissions from the plant;⁴⁷⁷ and

WHEREAS, the Joint Intervenors argue that air pollution causes decreased lung function, more frequent asthma symptoms, increased numbers of asthma and heart attacks, more frequent emergency department visits, additional hospital admissions, and increased numbers of deaths and a host of additional health impacts;⁴⁷⁸ and

WHEREAS, the Joint Intervenors argue that the RICE Alternative is not in the public interest because it would violate the Council’s policy on climate change.⁴⁷⁹ The Joint Intervenors argue that the Council has adopted a policy to reduce the City’s greenhouse gas emissions and pursue renewable energy and energy efficiency to address climate change and that both NOPS alternatives are counterproductive to those goals.⁴⁸⁰ The Joint Intervenors also argue that NOPS would be counter to the City’s Climate Action for a Resilient New Orleans plan and

⁴⁷⁵ Joint Intervenors’ Post-Hearing Brief at 74-75.

⁴⁷⁶ Joint Intervenors’ Post-Hearing Brief at 76-77.

⁴⁷⁷ Joint Intervenors’ Post-Hearing Brief at 76.

⁴⁷⁸ Joint Intervenors’ Post-Hearing Brief at 77-79, *citing* Direct Testimony and Exhibits of Dr. George Thurston, Docket No. UD-16-02, at 5-8, 10, and 25 (Jan. 6, 2017) (“Thurston-1”).

⁴⁷⁹ Joint Intervenors’ Post-Hearing Brief at 82-84.

⁴⁸⁰ Joint Intervenors’ Post-Hearing Brief at 82-84.

strategy to reduce its greenhouse gas emissions by 50% by 2020 and to goal of 255 MW of solar by 2030;⁴⁸¹ and

WHEREAS, the Joint Intervenor argue that ENO's proposed RICE Alternative would increase flood risks and could violate the City's flood protection ordinance, and would conflict with FEMA critical-infrastructure guidance;⁴⁸² and

WHEREAS, the Joint Intervenor argue that the RICE Alternative is not in the public interest because it was selected outside of the public participation and IRP Process.⁴⁸³ The Joint Intervenor argue that the fact that the Council entered into a settlement agreement with ENO in a public FERC docket regarding the termination of the System Agreement that included the provision requiring ENO to explore 120 MW of new-build peaking generation in New Orleans pre-determined the positions that ENO and the Advisors would take in this proceeding and that the record in this case provides no alternative explanation for their positions.⁴⁸⁴ The Joint Intervenor speculate that the Settlement Agreement holds such strong sway over this proceeding that it caused ENO and the Advisors to reject the least cost and reasonable alternatives to a gas plant, such as renewable and efficient energy systems, DSM, and increased electric capacity of the transmission system.⁴⁸⁵; and

WHEREAS, the Joint Intervenor argue that the Settlement Agreement substantially undermined the 2015 IRP process and that there is a lack of transparency in this docket regarding the Settlement Agreement because Council Resolutions No. R-16-332, R-16-506 and R-17-426 do not discuss it.⁴⁸⁶ The Joint Intervenor argue that due process has been violated because there

⁴⁸¹ Joint Intervenor's Post-Hearing Brief at 84-86.

⁴⁸² Joint Intervenor's Post-Hearing Brief at 87-88.

⁴⁸³ Joint Intervenor's Post-Hearing Brief at 88.

⁴⁸⁴ Joint Intervenor's Post-Hearing Brief at 89-90.

⁴⁸⁵ Joint Intervenor's Post-Hearing Brief at 90.

⁴⁸⁶ Joint Intervenor's Post-Hearing Brief at 91.

is no assurance that the prior Settlement Agreement does not in any way pre-determine the outcome of the decisions leading up to the one that is anticipated from the Council in this case.⁴⁸⁷

The Joint Intervenors criticize the Council and the Advisors for failing to take action in this docket to “resolve the due process issues that arise from the prior agreement;”⁴⁸⁸ and

WHEREAS, the Advisors conclude that the RICE Alternative presents the most viable alternative for the Council’s consideration in the instant docket to resolve ENO’s current transmission system reliability issues.⁴⁸⁹ The Advisors agree with ENO’s analysis that the RICE Alternative is capable of fully mitigating the NERC reliability issues over the planning period if coupled with future transmission upgrades (in the 2027 time frame). The Advisors state that if it turns out in 2027 that ENO does need to make transmission upgrades, the locally-sited RICE Alternative would “unload” the transmission lines so that ENO would likely be able to get the transmission outage necessary to complete the upgrades;⁴⁹⁰ and

WHEREAS, the Advisors state that under the economic analyses modeled either with or without the Council’s 2% DSM Goal, there is not much difference between the RICE Alternative and the CT Alternative.⁴⁹¹ However, the Advisors argue, the RICE Alternative is a better fit with ENO’s load and capability needs, especially when considering the Council’s 2% DSM Goal.⁴⁹² The Advisors state that there are two additional factors that must be considered as well: (1) the level of certainty in the capital cost estimates, and (2) several physical parameters of the RICE Alternative that potentially make it operationally more attractive to the Council.⁴⁹³ With respect to the capital cost estimates, the estimates for the RICE Alternative and the CT

⁴⁸⁷ Joint Intervenors’ Post-Hearing Brief at 91-92.

⁴⁸⁸ Joint Intervenors’ Post-Hearing Brief at 92.

⁴⁸⁹ Advisors’ Post-Hearing Brief at 60.

⁴⁹⁰ Advisors’ Post Hearing Brief at 61, 69.

⁴⁹¹ Advisors’ Post-Hearing Brief at 72, *citing* Rogers-1 at 51:5-19.

⁴⁹² Advisors’ Post-Hearing Brief at 72, *citing* Rogers-1 at 51:5-19.

⁴⁹³ Advisors’ Post-Hearing Brief at 72, *citing* Rogers-1 at 46:1-7, 51:5-19.

Alternative are fairly certain and based upon negotiated EPC contracts.⁴⁹⁴ On the other hand, the Advisors argue, the transmission cost estimates are based on generic high-level cost per mile-based estimates rather than a cost estimate based on a specific design.⁴⁹⁵ The Advisors find that the uncertainty in the transmission capital cost estimates is a concern that should be considered as well.⁴⁹⁶ In short, the Advisors explain, the RICE Alternative presents a lesser economic risk than either the CT Alternative or the Transmission Alternative because its capacity is more aligned with ENO's forecasted capacity needs than are both the CT Alternative, which offers more capacity than ENO needs in the near term and the Transmission Alternative, which offers no new capacity,⁴⁹⁷ and

WHEREAS, the Advisors state that with respect to the physical parameters of the RICE Alternative, the RICE Alternative is expected to operate at a lower capacity factor than the CT Alternative, would be dispatched in a more economic operating mode than the CT Alternative, the RICE unit is more flexible with respect to commitment and dispatch and is a better fit for the generation needs of the region, the RICE Alternative can more precisely match part load requirements and can most likely be dispatched with the RICE Alternative engines operating at or near their most efficient operating points.⁴⁹⁸ The Advisors state that at its full load operation, the RICE Alternative has a heat rate that is roughly 18% better than the CT Alternative, therefore it would have lower per MWh fuel costs as well as being less susceptible to fuel; and

WHEREAS, the Advisors point out that the RICE Alternative is expected to take roughly one year less to construct than the CT Alternative, meaning that ENO's NERC reliability issues would be addressed sooner by the RICE Alternative than by the CT Alternative, and far

⁴⁹⁴ Advisors' Post-Hearing Brief at 72, *citing* Rogers-1 at 46:8-14.

⁴⁹⁵ Advisors' Post-Hearing Brief at 72, *citing* Rogers-1 at 46:8-14.

⁴⁹⁶ Advisors' Post-Hearing Brief at 72, *citing* Rogers-1 at 46:8-14.

⁴⁹⁷ Advisors' Post-Hearing Brief at 72, *citing* Vumbaco-1 at 25:3-7.

⁴⁹⁸ Advisors' Post-Hearing Brief at 73, *citing* Rogers-1 at 46:15-47:18.

more quickly than a “No NOPS” (transmission-only) scenario particularly given the constructability challenges that the Company must overcome in order to implement any transmission upgrades;⁴⁹⁹ and

WHEREAS, the Advisors agree that the modular nature of the proposed RICE Alternative is an advantage.⁵⁰⁰ The Advisors explain that these units can be operated separately, so that the capacity committed can be matched more closely to actual system needs -- if one unit goes down, others can continue to run.⁵⁰¹ The Advisors also state that the forced outage rate of the RICE units is lower than for the CT, which makes them an inherently more reliable choice, and the smaller revenue requirement would have a lesser impact on ratepayers because it there is less exposure to capital costs;⁵⁰² and

WHEREAS, the Advisors agree with ENO that it is not appropriate to install only four to five of the units at this time and to wait to install additional units in the future.⁵⁰³ The Advisors do not believe that this would meet the reliability need of ENO. The Advisors also assert that this approach would add costs over the long term;⁵⁰⁴ and

WHEREAS, the Advisors argue that the RICE Alternative also would provide other significant benefits to New Orleans, including operational flexibility, dynamic system support for voltage regulation; reduction of dependence on transmission to import power and reduction in the need to construct additional river-crossing transmission for at least 10 years; provision of reactive power support, which would increase the reliability of the surrounding transmission system and enhances its ability to appropriately respond to system disturbances; and on-site

⁴⁹⁹ Advisors’ Post Hearing Brief at 68-69.

⁵⁰⁰ Advisors’ Post-Hearing Brief at 66-68, *citing* Brubaker-2 at 9:4-16.

⁵⁰¹ Advisors’ Post-Hearing Brief at 67, *citing* Brubaker-2 at 9:4-9.

⁵⁰² Advisors’ Post-Hearing Brief at 71-73.

⁵⁰³ Advisors’ Post-Hearing Brief at 67, *citing* Hr’g Tr. 12/18/17, 335:7-336:2.

⁵⁰⁴ Advisors’ Post Hearing Brief at 68.

black-start capability to ability to provide a source of power to ENO's critical loads and to support restoration of service after a major outage or storm event;⁵⁰⁵ and

WHEREAS, the Advisors agree with ENO that a local resource with black-start capability, in close electrical proximity to the electric demand, would enable much more effective voltage and frequency response during the black-start process and therefore would greatly enhance ENO's ability to restore electric service, should a complete loss of service on the electric system occur, such as in the event of a major storm.⁵⁰⁶ Having local generation in the City that provides a dependable source of black-starting power and avoids the risks of transmission failure is especially important given that ENO's system exists in an extreme weather event region.⁵⁰⁷ The CT Alternative does not have this very important feature, and therefore, from a reliability standpoint, the Advisors believe that other alternatives, such as the RICE Alternative, would be preferable to the construction of the CT Alternative; and

WHEREAS, the Advisors note that a facility with on-site black-start capability might also be able to assist in restarting the motors at the S&WB pumping station in the event of a loss of electrical service, but that this would be subject to further study.⁵⁰⁸ In the Advisors' view, having black-start capability would be critical to insuring that local generation could be depended upon to power S&WB's pumping plant, in the event of a failure of S&WB's generators during critical flooding events;⁵⁰⁹ and

⁵⁰⁵ Advisors' Post-Hearing Brief at 68-70; C. Long-2 at 26:4-28:2.

⁵⁰⁶ Advisors' Post-Hearing Brief at 70; C. Long-2 at 28:2-29:7-11. C. Long-3 at 31:21-32:1.

⁵⁰⁷ Advisors' Post-Hearing Brief at 70, *citing* Movish-1 at 40:1-5.

⁵⁰⁸ Advisors' Post Hearing Brief at 70; C. Long-3 at 44:17-45:18; Movish-1 at 5, 8-9.

⁵⁰⁹ Advisors' Post-Hearing Brief at 73; Movish-1 at 9:13-16.

WHEREAS, similar to the CT Alternative, reports submitted by ENO into the record⁵¹⁰ conclude that the groundwater withdrawal associated with the RICE Alternative will not exacerbate ground subsidence or cause damage to infrastructure in New Orleans East.⁵¹¹ Based on engineering estimates provided by ENO's equipment vendor and contractor, the anticipated pumping rate for the RICE Alternative is less than one tenth of the pumping rate for the CT Alternative.⁵¹² When compared to the deactivated Michoud units, the RICE Alternative usage rate will result in a 99.9% groundwater use reduction;⁵¹³ and

WHEREAS, the Advisors find it significant that ENO witness Ms. Higgins provided similar analyses regarding the level of emissions anticipated from the RICE Alternative, and concluded that the RICE Alternative would result in a substantial decrease in permitted emissions for the NOPS as compared to the currently permitted Michoud Power Plant;⁵¹⁴ and

WHEREAS, the Joint Intervenors argue that there is no safe level of exposure to certain pollutants.⁵¹⁵ Specifically, witness Thurston opined that "any increase in pollution will increase the risk of adverse effects at all levels of prevailing air pollution, even when the NAAQS standards are not violated."⁵¹⁶ Joint Intervenors also disagree that NAAQS are effective or that meeting NAAQS air quality standards prevents significant adverse health effects from occurring in the exposed population.⁵¹⁷ The Advisors disagree with this assertion.⁵¹⁸ They explain that simply because a source creates emissions greater than zero does not necessarily infer significant

⁵¹⁰ Advisors' Post-Hearing Brief at 62, *citing* Addendum to the C-K Associates Technical Report of November 16, 2016: Evaluation of Predicted Drawdown and Consolidation Settlement Resulting from Proposed NOPS Pumping ("Addendum to C-K Report"), attached to Losonsky-1 as Exhibit GL-2.

⁵¹¹ Advisors' Post-Hearing Brief at 62, *citing* Losonsky-1 at 6:21-23.

⁵¹² Advisors' Post-Hearing Brief at 63, *citing* Losonsky-1, Ex. GL-2 at 2.

⁵¹³ Advisors' Post-Hearing Brief at 63, *citing* Losonsky-1, Ex. GL-2 at 2.

⁵¹⁴ Advisors' Post-Hearing Brief at 64, *citing* Higgins-1 at 17:32-33, 50:9-15; *see also*, ENO-2 at 14:9-11.

⁵¹⁵ Advisors' Post-Hearing Brief at 56, *citing* Thurston-1 at 15:5-6.

⁵¹⁶ Advisors' Post-Hearing Brief at 56, *citing* Thurston-1 at 17:13-15.

⁵¹⁷ Advisors' Post-Hearing Brief at 57, *citing* Thurston-1 at 18:6-7.

⁵¹⁸ Advisors' Post-Hearing Brief at 58.

adverse health effects.⁵¹⁹ The Advisors believe that if this logic were accepted, the vast majority of vehicles and manufacturing facilities across the country would be prohibited from operation because they violate the “more than zero” standard that the Joint Intervenors have advanced in this case.⁵²⁰ While the Advisors support clean sources of energy, especially renewables when cost effective and appropriate, responsible energy policymaking requires consideration of a number of factors that inform decisions to acquire new resources;⁵²¹ and

WHEREAS, the Advisors agree with ENO’s witness, Higgins that the RICE Alternative would result in a substantial decrease in permitted emissions for NOPS as compared to the currently permitted Michoud Power Plant.⁵²² While it is extremely important for ENO to have generating capacity in New Orleans for reliability purposes, this generation must be clean, efficient and have no significant impact on the environment.⁵²³ The Advisors conclude that the RICE Alternative is the best option to meet ENO’s reliability issues and avoid any adverse impact on public health or the environment. C-K Associates concluded, and the Advisors agree, that the evidence presented by ENO shows that the predicted ambient concentrations from the RICE Alternative are well below the NAAQS for all modeled chemicals;⁵²⁴ and

WHEREAS, the Council finds that ENO has committed to operate the plant in an environmentally safe manner and to comply with all EPA, LDEQ and local laws and regulations;⁵²⁵ and

⁵¹⁹ Advisors’ Post-Hearing Brief at 58.

⁵²⁰ Advisors’ Post-Hearing Brief at 58.

⁵²¹ Advisors’ Post-Hearing Brief at 58.

⁵²² Advisors’ Post-Hearing Brief at 57; *see also*, ENO-2 at 50:11-15.

⁵²³ Advisors’ Post-Hearing Brief at 57.

⁵²⁴ Advisors’ Post-Hearing Brief at 65.

⁵²⁵ Advisors’ Post-Hearing Brief at 66, *citing* Hr’g Tr. 12/20/17, 132:21-25, 133:1-12.

WHEREAS, the Council finds that it has been shown that the RICE Alternative has the ability to resolve ENO’s current transmission system reliability issues, mitigate risk and provide operational flexibility; and

WHEREAS, the record indicates that the RICE Alternative and the CT Alternative are similarly attractive in terms of economics. However, as noted above, the Council does not measure the public interest determination based on economics alone. Determining whether a proposal is in the public interest requires the Council to balance all relevant factors and no single element of the public interest should be considered in isolation; and

WHEREAS, the Council notes favorably the testimony of Advisors’ witness Vumbaco, who aptly describes the public interest standard as “a ‘net benefits’ test, but such a test encompasses more than a simple algorithm or numerical analyses and often results in a subjective balancing of interests by the regulator in making its determination.”⁵²⁶ The Council has an obligation to evaluate all aspects of ENO’s proposal in connection with the need it will serve, and in so doing, to weigh the benefits of ENO’s choices of technology to determine if they are justified by the costs. The Council must also consider reliability needs with respect to transmission, voltage and regulation support, transmission constructability issues, the benefits of black-start capability, and storm restoration considerations when considering a path forward for New Orleans; and

WHEREAS, the record supports the conclusion that the RICE Alternative is less sensitive to changes in the MISO capacity market prices, has a better heat rate, and operationally provides more dispatch flexibility than the CT or Transmission Alternatives. When considering the MISO capacity market, transmission constructability uncertainty, operation and economic

⁵²⁶ Redacted Direct Testimony & Exhibits of Joseph Vumbaco, Docket No. UD-16-02, at 11:1-4 (Nov. 20, 2017) (“Vumbaco-1”).

risk to ratepayers, the generation alternative that best hedges and partially mitigates such risk is the construction of the RICE Alternative in combination with the incorporation of renewable technologies and realistically achievable DSM potential in ENO's service territory; and

WHEREAS, ENO presented expert testimony that is well supported by two detailed studies containing site specific analysis and calculations that also provided historical comparisons to past groundwater usage. The Council is persuaded by the evidence presented by ENO that the risk of subsidence resulting from groundwater withdrawal is *de minimis* considering the expected pumping rate for the RICE Alternative is less than one tenth of the pumping rate for the CT Alternative. The Council also finds it compelling that ENO's evidence demonstrates that when compared to the deactivated Michoud units, the RICE Alternative usage rate will result in a 99% groundwater use reduction, even if operated 24 hours a day, 365 days a year; and

WHEREAS, the Council finds that ENO has shown that the RICE Alternative is in the public interest because: (1) it resolves a critical and immediate reliability need and will do so for at least a decade; (2) it is more appropriately sized to meet the City's anticipated capacity needs in accordance with ENO's load forecast; (3) it provides operational flexibility that will support incorporation of renewables into ENO's generation portfolio, a key goal of the Council and the City; (4) it will result in a significant reduction in groundwater use compared to the prior Michoud plant, and below even the CT Alternative; (5) it is expected to result in a reduction in air emissions associated with the new units as compared with the prior Michoud plant which operated within the City for half a century until just two years ago; and, (6) importantly, it has on-site black-start capability, which will support ENO's critical loads in the event of an outage

and will aid in restoration efforts after a storm, a very valuable feature given the City's susceptibility to extreme weather; and

WHEREAS, based upon the record in this proceeding and the information provided in ENO's application, including transmission models and underlying assumptions, as well as the parties' evaluation of this information, and for the reasons set forth above, the Council concludes that ENO has shown that its selection of the RICE technology serves the public interest, assuming that ENO complies with all applicable laws and regulations, including, but not limited to, compliance with all EPA and LDEQ requirements; and

C. Whether ENO appropriately considered a full range of options to meet the identified need

WHEREAS, ENO argues that it appropriately considered a full range of options to meet its identified supply needs.⁵²⁷ It explains that (1) ENO's 2015 Final IRP included an extensive review of options for meeting the long-term needs of the Company's customers; (2) possibilities other than new gas-fired generation would not meet ENO's supply and reliability needs, and (3) a formal competitive process to select a resource addition for ENO would have been costly to customers and wasteful considering the Company's specific supply and reliability needs;⁵²⁸ and

WHEREAS, ENO argues that its 2015 IRP process determined that CT capacity is the best alternative to meet ENO's identified supply need, and subsequent analyses confirm that result and that the RICE resource is a reasonable alternative that provides many of the same benefits as the proposed CT.⁵²⁹ ENO argues that Joint Intervenors' witness Mr. Fagan contends that ENO did not perform a rigorous analysis of resource alternatives, but that he ignores ENO's 2015 Final IRP, and confirmed at the hearing that he had not reviewed it in preparing his

⁵²⁷ ENO Post-Hearing Brief at 92.

⁵²⁸ ENO Post-Hearing Brief at 92.

⁵²⁹ ENO Post-Hearing Brief at 92.

testimony.⁵³⁰ ENO argues that in its 2015 Final IRP, ENO conducted a DSM Potential Study, Generation Technology Assessment, and Portfolio Evaluation and documented the extensive analysis undertaken and stakeholder input sought over the course of nearly 18 months of work including hundreds of hours of data review, modeling, post-processing analysis, stakeholder review, public technical conferences, and reports to the Council.⁵³¹ ENO argues that the extensive 2015 IRP process resulted in the conclusion that ENO has a substantial need for peaking and reserve capacity and that a CT unit is the lowest reasonable cost resource capable of meeting that need.⁵³² and

WHEREAS, ENO states that it has considered other options to meet its need, such as other natural gas technology, transmission upgrades, and a combination of solar, DSM, and batteries, and that none of these options meet ENO's reliability and capacity needs, nor do they provide the same benefits as NOPS.⁵³³ ENO states that it conducted technology assessments in 2016, March 2016, November 2016, and Spring 2017 which evaluated a total of at least 14 different gas-fired generation technologies, and concluded that the 226 MW CT is the most cost-effective alternative, and with the seven Wärtsilä RICE units has the lowest levelized cost of electricity of generators in the 100-130 MW range;⁵³⁴ and

WHEREAS, ENO states that transmission upgrades are not a viable alternative to constructing NOPS.⁵³⁵ ENO argues that transmission can only move power around, it cannot produce electrical energy, capacity or much-needed dynamic reactive power in the DSG load pocket.⁵³⁶ ENO notes that its analysis determined that five transmission upgrades need to be

⁵³⁰ ENO Post-Hearing Brief at 93, *citing* Fagan-2 at 10, Hr'g Tr. 12/19/17, 16-17.

⁵³¹ ENO Post-Hearing Brief at 93, *citing* Cureington-2 at 9, Cureington-8 at 59.

⁵³² ENO Post-Hearing Brief at 93, *citing* Cureington-8 at 59.

⁵³³ ENO Post-Hearing Brief at 94.

⁵³⁴ ENO Post-Hearing Brief at 94-95.

⁵³⁵ ENO Post-Hearing Brief at 95.

⁵³⁶ ENO Post-Hearing Brief at 95.

constructed in the absence of NOPS, and that there are significant concerns regarding constructability of those upgrades, including soil condition, obstructions, and environmental challenges that would increase the cost of construction.⁵³⁷ ENO submitted testimony that the outages required to make these upgrades would span many months over many peak hours and that getting enough outages to construct the upgrades could take years because the outages can only be taken at the lowest load times, and expressed skepticism that it can be done at all;⁵³⁸ and

WHEREAS, ENO argues that with respect to some combination of renewable resources, increased DSM, and battery resources, those resources are not an adequate replacement for NOPS.⁵³⁹ ENO argues that all are speculative and do not guarantee that ENO can produce energy when and where it is needed.⁵⁴⁰ ENO argues that these options are not consistent with its current supply need.⁵⁴¹ ENO argues that no witness has put forth testimony that ENO could count on renewable resources, DSM and batteries to solve its reliability issues and that none of the Joint Intervenors' witnesses have put forth a specific combination of resources to meet both capacity and reliability needs, much less an economic analysis of costs to ENO's customers;⁵⁴² and

WHEREAS, ENO argues that a more formal RFP process was not necessary to identify and evaluate ENO's supply options, and it would have been costly to customers.⁵⁴³ ENO argues that a formal RFP or competitive all-source solicitation to fulfill its identified resource needs was unwarranted for several reasons: (1) a specific types of generation are needed at a specific location (a peaking resource at Michoud) and holding an open-source RFP to encourage other

⁵³⁷ ENO Post-Hearing Brief at 95.

⁵³⁸ ENO Post-Hearing Brief at 95, *citing* Hr'g Tr. 12/15/17, 171, 193-194 and 197-198.

⁵³⁹ ENO Post-Hearing Brief at 96.

⁵⁴⁰ ENO Post-Hearing Brief at 96.

⁵⁴¹ ENO Post-Hearing Brief at 96.

⁵⁴² ENO Post-Hearing Brief at 96.

⁵⁴³ ENO Post-Hearing Brief at 96.

types of resources at other locations will not meet this specific need; (2) the Council's rules and regulations do not require that an RFP be conducted prior to adding generating capacity intended to serve Council-jurisdictional customers; and (3) Joint Intervenor's witness Mr. Henderson recognized that there may be legitimate reasons why a utility or utility regulator might determine not to use a competitive resource requirement and that one such reason is that they are expensive and take time to complete.⁵⁴⁴ In this case, ENO argues, it would have been improper to saddle customers with the cost of an RFP process or all-source solicitation.⁵⁴⁵ ENO notes that the fact that it already owns the Michoud site gives it a likely cost advantage over any other potential supplier, ENO's need for peaking capacity cannot be met through DSM or intermittent supply-side resources, and because there are no local generating resources in New Orleans, relying on PPAs would be inappropriate.⁵⁴⁶ ENO concludes that the unique aspects of ENO's capacity and reliability needs, the costs of an RFP process or all-source solicitation would not have been in the interest of ENO's customers.⁵⁴⁷ ENO also points out that the major cost component of ENO's proposed self-build, the , EPC Contract, was tested through a competitive selection process, that together with other risk mitigation measures provide protections for customers that serve the public interest;⁵⁴⁸ and

WHEREAS, Air Products states that is not aware of any alternative technology option that would be feasible and should have been considered;⁵⁴⁹ and

WHEREAS, Air Products argues that ENO appropriately considered the availability and practicality, as well as the economics of additional resources, including solar resources, wind

⁵⁴⁴ ENO Post-Hearing Brief at 96-97.

⁵⁴⁵ ENO Post-Hearing Brief at 97.

⁵⁴⁶ ENO Post-Hearing Brief at 97-98.

⁵⁴⁷ ENO Post-Hearing Brief at 98.

⁵⁴⁸ ENO Post-Hearing Brief at 98.

⁵⁴⁹ Air Products Post-Hearing Brief at 12.

resources, and other resources.⁵⁵⁰ Air Products notes that ENO has chosen to include 50 MW of solar resources in its capacity expansion plan along with the NOPS unit, and argues that this is a reasonable amount of solar generation to be added to the system, but that it is an intermittent resource which is available only at such times as there are normal amounts of sunshine;⁵⁵¹ and

WHEREAS, Air Products argues that attempts to include larger amounts of solar resources, instead of RICE units, would subject ENO's customers to an intolerable risk of outages because solar cannot be counted on fully to perform at times of high system loads.⁵⁵² Air Products argues that there are practically no available wind resources that could serve load without substantial amounts of investment in transmission.⁵⁵³ Air Products states that wind resources typically have their highest output at night-time in winter, when the output is least needed to serve load, so that even if it were practically available and economic, it would not fulfill peak needs in New Orleans;⁵⁵⁴ and

WHEREAS, Air Products disputes the Joint Intervenors' suggestion to use interruptible load as a resource.⁵⁵⁵ Air Products states that it is a customer that has part of its load interruptible because the nature of its operations allows for a certain amount of storage.⁵⁵⁶ It states that it is unaware of any other customers interested in, or, importantly, capable of taking, interruptible power in New Orleans.⁵⁵⁷ Air Products also states that should interruptions increase beyond the level contemplated in the Large Interruptible Service tariff, it is very possible that Air Products would no longer be able to tolerate the use of interruptible power and would convert to

⁵⁵⁰ Air Products Post-Hearing Brief at 12.

⁵⁵¹ Air Products Post-Hearing Brief at 12.

⁵⁵² Air Products Post-Hearing Brief at 13.

⁵⁵³ Air Products Post-Hearing Brief at 13.

⁵⁵⁴ Air Products Post-Hearing Brief at 13.

⁵⁵⁵ Air Products Post-Hearing Brief at 13.

⁵⁵⁶ Air Products Post-Hearing Brief at 13.

⁵⁵⁷ Air Products Post-Hearing Brief at 13.

all firm power.⁵⁵⁸ Finally, Air Products notes that when ENO evaluates its loads and resources, it fully recognizes the interruptible nature of the load and removes it from its net load obligation, thus ENO's capacity deficit of about 100 MW already assumes Air Products' 20 MW of interruptible load will be interrupted. Air Products states that if it were not interruptible, ENO's deficit would be about 20 MW higher than what its load and capacity statement already shows;⁵⁵⁹ and

WHEREAS, NOCS argues that the Council should find that ENO neglected to consider the full range of options to meet the purported need for capacity. NOCS characterizes ENO's selection process as arbitrary and unsupported because in selecting the CT Alternative (which contradicted its own AURORA model results), ENO selected the self-build CT Alternative without testing the market.⁵⁶⁰ NOCS argues that an RFP process is an appropriate way to test the market to determine the full range of credible options when a utility needs additional capacity.⁵⁶¹ NOCS argues that ENO's process for selecting the NOPS project was so flawed, and excluded so many potentially more economic resources, that ENO cannot show that it selected the least costly option, and that prudence dictates a comparison of a selected resource to alternatives as part of the showing of least cost;⁵⁶² and

WHEREAS, NOCS argues that ENO's Louisiana affiliates are required by the Louisiana Public Service Commission ("LPSC") to conduct formal RFPs when acquiring or constructing new long-term generating resources.⁵⁶³ NOCS also argues that any electric public utility must

⁵⁵⁸ Air Products Post-Hearing Brief at 13.

⁵⁵⁹ Air Products Post-Hearing Brief at 13.

⁵⁶⁰ NOCS Post-Hearing Brief at 19.

⁵⁶¹ NOCS Post-Hearing Brief at 19.

⁵⁶² NOCS Post-Hearing Brief at 19.

⁵⁶³ NOCS Post-Hearing Brief at 20.

show that its actions are prudent and reasonable.⁵⁶⁴ NOCS argues that ENO can only meet its burden of showing that its decision-making in electing to construct the NOPS project was prudent and reasonable by showing that NOPS is the least-cost option among alternatives, NOCS asserts that, because ENO failed to issue an RFP its application is fatally flawed and must be dismissed,⁵⁶⁵ and

WHEREAS, NOCS argues that ENO neglected to consider the full range of options to meet any identified need because it didn't fully analyze a transmission solution.⁵⁶⁶ NOCS argues that ENO categorically ruled out a transmission option as a solution to resolve the transmission-related reliability need, and as a result, chose to evaluate the Transmission Alternative only as an afterthought,⁵⁶⁷ and

WHEREAS, the Joint Intervenors argue that ENO's application failed to consider an adequate range of alternatives to the proposed gas-fired plants, including specific alternative portfolios that the Council ordered ENO to evaluate so that the Council could make an informed decision in this proceeding.⁵⁶⁸ The Joint Intervenors argue that, despite the Council's order to do so, ENO has never assessed in a single portfolio (1) the potential for making transmission upgrades to remain compliant with NERC reliability standards; (2) installing the planned 100 MW of solar; (3) implementing the Council's 2% DSM Goal; and (4) the inclusion of battery storage. The Joint Intervenors argue that because ENO has yet to even attempt the alternatives analysis the Council required, and is therefore in violation of a Council resolution, the Council

⁵⁶⁴ NOCS Post-Hearing Brief at 20-21, *citing Gulf States Utils. Co. v. Louisiana Pub. Serv. Comm'n*, 578 So. 2d 71 (La. 1991); *Alliance for Affordable Energy, Inc. v. Council of the City of New Orleans*, 578 So.2d 949, 973-74 (La. App. 4th Cir. 1991), *vacated after consent decree* at 588 So. 2d 89 (La. 1991); *S. Central Bell Telephone v. Louisiana Pub. Serv. Comm'n*, 352 So. 2d 964, 972-973 (La. 1977), *cert. denied*, 437 U.S. 911, 98 S. Ct. 3103, 57 L. Ed. 2d 1142 (1978) (finding that "ratepayers should not bear the burden of a utility's imprudence.").

⁵⁶⁵ NOCS Post-Hearing Brief at 22-23.

⁵⁶⁶ NOCS Post-Hearing Brief at 24-26.

⁵⁶⁷ NOCS Post-Hearing Brief at 25.

⁵⁶⁸ Joint Intervenors' Post-Hearing Brief at 92.

should deny ENO's application as incomplete.⁵⁶⁹ NOCS argues that ENO could construct additional transmission capacity and access generating capacity through purchases.⁵⁷⁰ NOCS states, however, that the Advisors are correct that ENO's evaluation of the Transmission Alternative is woefully inadequate – in its current state – to support a decision to pursue that option;⁵⁷¹ and

WHEREAS, the Joint Intervenors also argue that the Council in Resolution No. R-16-506 ordered ENO to specifically evaluate a set of four portfolios designed by the Advisors, but that ENO did not run those portfolios, including the “Case 2” portfolio that resembles the combination of resources recommended by Joint Intervenor's witness Mr. Fagan.⁵⁷² Rather Joint Intervenors argue, ENO used a load forecast that did not include the 2% DSM Goal which made its version of Case 2 appear more costly and therefore less attractive than building a gas-fired plant.⁵⁷³ Joint Intervenors also argue that ENO never evaluated the possibility of a battery resource in Case 2, or in any case in which it would not also build a gas-fired plant;⁵⁷⁴ and

WHEREAS, the Joint Intervenors argue that ENO's method of selecting the contractors for these projects demonstrates that a competitive process is necessary to protect ratepayers.⁵⁷⁵ The Joint Intervenors argue that ENO failed to use a competitive procurement process to select its two proposed gas plants, making it impossible to determine whether they are the best, least-cost resources to meet the City's needs.⁵⁷⁶ Joint Intervenors urge the Council to reject ENO's application and require the Company to conduct a competitive procurement process;⁵⁷⁷ and

⁵⁶⁹ Joint Intervenors' Post-Hearing Brief at 92.

⁵⁷⁰ NOCS Post-Hearing Brief at 25.

⁵⁷¹ NOCS Post-Hearing Brief at 26.

⁵⁷² Joint Intervenors' Post-Hearing Brief at 93-95.

⁵⁷³ Joint Intervenors' Post-Hearing Brief at 95.

⁵⁷⁴ Joint Intervenors' Post-Hearing Brief at 95.

⁵⁷⁵ Joint Intervenors' Post-Hearing Brief at 96.

⁵⁷⁶ Joint Intervenors' Post-Hearing Brief at 97.

⁵⁷⁷ Joint Intervenors' Post-Hearing Brief at 97.

WHEREAS, the Joint Intervenor's argue that a competitive procurement process would provide the following benefits (1) transparency for regulators and stakeholders; (2) cost proposals that are based on market conditions; (3) bids that reflect competitive pressures, offering the best value for the money; (4) full documentation of financial and engineering assumptions used to develop bids; (5) power supply and demand-side resources that are evaluated on an equal footing; (6) assessment of a complete set of both conventional and innovative alternatives; and (7) creative solutions from a wider marketplace, based on the latest technology.⁵⁷⁸ The Joint Intervenor's argue that the ENO team procuring contractors was instructed to examine only gas-fired peaker plants, and that rather than conducting an open solicitation, ENO spoke to only six companies, and only four of those companies participated by submitting bids.⁵⁷⁹ Moreover, the Joint Intervenor's argue that ENO limited the RFP for the CT Alternative to specifically request a Mitsubishi 501GAC gas turbine, and they limited their search to companies they were aware of that did that sort of work.⁵⁸⁰ Thus, the Joint Intervenor's argue, from the beginning ENO had no intention of evaluating alternatives to the gas-fired peaker plant, and did not issue an RFP stating it had transmission needs and generation needs and asking for proposals on how to resolve these concerns;⁵⁸¹ and

WHEREAS, the Joint Intervenor's argue ENO's process for selection of the RICE Alternative contractor fares no better.⁵⁸² The Joint Intervenor's argue that ENO's process was insufficient because it only requested bids from two contractors;⁵⁸³ and

⁵⁷⁸ Joint Intervenor's Post-Hearing Brief at 97-98.

⁵⁷⁹ Joint Intervenor's Post-Hearing Brief at 98.

⁵⁸⁰ Joint Intervenor's Post-Hearing Brief at 98.

⁵⁸¹ Joint Intervenor's Post-Hearing Brief at 98-99.

⁵⁸² Joint Intervenor's Post-Hearing Brief at 99.

⁵⁸³ Joint Intervenor's Post-Hearing Brief at 99.

WHEREAS, the Joint Intervenors urge the Council to disregard ENO's arguments that an RFP is unnecessary because ENO had a specific need for local dispatchable generation resources and it decided that DSM and the supply-side resources would not be sufficient.⁵⁸⁴ The Joint Intervenors argue that ENO's process is simply a failed version of traditional utility procurement and that while this type of solicitation, if done correctly, may deliver price competition, the bidding does not address the fundamental question of whether building a power plant is the optimal use of customer funds.⁵⁸⁵ In contrast, the Joint Intervenors argue, an all-source competitive solicitation would provide information about costs and benefits of any resource alternatives that could potentially fulfill the utility's needs and adds confidence that the resource selected is the least-cost resource;⁵⁸⁶ and

WHEREAS, the Joint Intervenors argue that ENO's selection method was not a competitive solicitation at all, and thus, the Council cannot even be assured that the price to be paid by ratepayers is reasonable or fair because with such a small sample size and the lack of transparency surrounding how the potential bidders were selected, it is impossible for the Council to know whether costs associated with either NOPS plant proposal adequately reflect the market;⁵⁸⁷ and

WHEREAS, the Joint Intervenors argue that ENO's selection process is illustrative of a pervasive problem of utility culture that prefers traditional solutions and avoids innovation.⁵⁸⁸ They argue that it ignores the fact that the market landscape for utility resources has changed substantially in recent years;⁵⁸⁹ and

⁵⁸⁴ Joint Intervenors' Post-Hearing Brief at 100.

⁵⁸⁵ Joint Intervenors' Post-Hearing Brief at 100.

⁵⁸⁶ Joint Intervenors' Post-Hearing Brief at 100-101.

⁵⁸⁷ Joint Intervenors' Post-Hearing Brief at 101.

⁵⁸⁸ Joint Intervenors' Post-Hearing Brief at 101.

⁵⁸⁹ Joint Intervenors' Post-Hearing Brief at 101.

WHEREAS, the Advisors argue that while more data is generally preferable when making decisions based on highly technical information, and a more extensive use of the AURORA model's optimizations functions would have been beneficial, the Council has more than enough information before it to render a decision in this case, particularly in light of significant, ongoing risk to ratepayers which will only be exacerbated by further delay.⁵⁹⁰ The Advisors state that ENO has identified a reasonable range of options to meet the specific identified needs in this case, and record contains sufficient information to decide on ENO's application;⁵⁹¹ and

WHEREAS, the Advisors note that while an IRP process was not performed as part of ENO's application, ENO's application was significantly informed by the analysis it performed in its 2015 Final IRP. They report that as part of its 2015 Final IRP, ENO performed a technology assessment in which ENO screened a wide range of generation technologies to define a set of reference supply-side generation technologies that would be modeled in the IRP process.⁵⁹² The final set of supply-side generation technologies included: pulverized coal generation, CTs, CCGT, internal combustion engines, generation from biomass, nuclear, wind, solar, and battery storage;⁵⁹³ and

WHEREAS, the Advisors argue that the need for some level of generation in the City has long been known to ENO and the Advisors, and was certainly identified in the 2015 IRP process. In fact, the preferred portfolio identified in ENO's 2015 Final IRP analysis included a 250 MW CT, which is consistent with ENO's 226 MW CT Alternative.⁵⁹⁴ The Advisors explain that the reduction in size and change in technology that led to the RICE Alternative proposal was

⁵⁹⁰ Advisors' Post-Hearing Brief at 75.

⁵⁹¹ Advisors' Post-Hearing Brief at 75.

⁵⁹² Advisors' Post-Hearing Brief at 75, *citing* Rogers-1 at 14:4-9.

⁵⁹³ Advisors' Post-Hearing Brief at 75, *citing* Rogers-1 at 14:4-9.

⁵⁹⁴ Advisors' Post-Hearing Brief at 76.

due largely to the availability of new data acquired and analyses performed since the close of the 2015 IRP process.⁵⁹⁵ The Advisors also state that ENO's analyses in both the 2015 Final IRP and in this docket are further informed by the input from the Advisors that the initial analyses needed to be supplemented to ensure that the Council has enough information to make a reasoned decision;⁵⁹⁶ and

WHEREAS, the Advisors explain that ENO did perform a significant amount of analysis of various technologies and portfolios in the 2015 IRP process.⁵⁹⁷ They state that with regard to peaking technologies modeled in the IRP, ENO included six different internal combustion engine CT technologies ranging from 19 MW to 194 MW.⁵⁹⁸ Further, the Advisors argue, ENO ran the AURORA optimization process in the 2015 Final IRP and it chose a 382 CCGT in three of the four scenarios run and 1,150 MW of solar with 50 MW of wind in the fourth scenario run.⁵⁹⁹ ENO did not choose a CCGT, however, instead chose a 194 MW CT unit for its preferred portfolio, arguing that such a unit was better suited to meet the peaking power need identified in the IRP than a CCGT.⁶⁰⁰ In performing additional production cost analyses at the request of the Advisors and Intervenors, ENO increased the size to a 250 MW CT;⁶⁰¹ and

WHEREAS, the Advisors state that neither the size nor the timing of the project was optimized as part of the IRP process, and⁶⁰² the current timing of either the CT or the RICE Alternative appears to be "as soon as possible" based upon the anticipated schedule durations for

⁵⁹⁵ Advisors' Post-Hearing Brief at 76.

⁵⁹⁶ Advisors' Post-Hearing Brief at 76.

⁵⁹⁷ Advisors' Post-Hearing Brief at 76.

⁵⁹⁸ Advisors' Post-Hearing Brief at 76, *citing* Rogers-1 at 14:9-11.

⁵⁹⁹ Advisors' Post-Hearing Brief at 76, *citing* Rogers-1 at 14:16-15:24.

⁶⁰⁰ Advisors' Post-Hearing Brief at 76, *citing* Rogers-1 at 14:16-15:24.

⁶⁰¹ Advisors' Post-Hearing Brief at 76, *citing* Rogers-1 at 16:4-13.

⁶⁰² Advisors' Post-Hearing Brief at 76, *citing* Rogers-1 at 17:11-18:2.

each of the alternatives.⁶⁰³ The Advisors believe that this suggests that ENO cannot solely rely on the economic analyses presented in the IRP to demonstrate a case for the NOPS unit,⁶⁰⁴ and

WHEREAS, the Advisors state that ENO has provided three sets of economic analyses in this proceeding: one set with the Initial Application, one set as part of the supplemental testimony and one set with the Supplemental Application.⁶⁰⁵ The Advisors note that the Initial Application generally provided a screening analysis of CT Alternatives.⁶⁰⁶ They explain that the supplemental testimony was required by Council Resolution No. R-16-506 and was in response to a September 19, 2016 request by the Council’s Advisors for ENO to perform additional AURORA IRP modeling to assist the Council in determining whether the construction of NOPS is necessary and in the public interest.⁶⁰⁷ The Advisors state that, the analyses included with the Supplemental Application were also developed utilizing the AURORA production cost modeling software and were, in part, informed by the Advisors’ recommendations,⁶⁰⁸ and

WHEREAS, the Advisors made their September 19, 2016 request that ENO perform additional analyses because the Advisors believed that over the 20 months it had taken ENO to perform the 2015 IRP and in the time since the 2015 Final IRP was filed, several important developments had occurred that were not reflected in the 2015 Final IRP analysis.⁶⁰⁹ Specifically, the Advisors explain, these were: (1) the acquisition of the Algiers service territory and its associated customer load; (2) the Council’s expression of its 2% DSM Goal; (3) the increase in size of the Union Power Block 1 (“UPS”) acquisition; (4) the suggestion that there may be a Transmission Alternative to the installation of NOPS; (5) the revised, dramatically

⁶⁰³ Advisors’ Post-Hearing Brief at 76-77, *citing* Rogers-1 at 17:11-18:2.

⁶⁰⁴ Rogers-1 18:7-8.

⁶⁰⁵ Advisors’ Post-Hearing Brief at 77, *citing* Rogers-1 18:11-19:3.

⁶⁰⁶ Advisors’ Post-Hearing Brief at 77, *citing* Rogers-1 18:11-19:3.

⁶⁰⁷ Advisors’ Post-Hearing Brief at 77, *citing* Rogers-1 18:11-19:3.

⁶⁰⁸ Advisors’ Post-Hearing Brief at 77, *citing* Rogers-1 18:11-19:3.

⁶⁰⁹ Advisors’ Post-Hearing Brief at 78, *citing* Rogers-1 at 19:3-21:2.

different load forecast; (6) the commitment by ENO to pursue AMI; and (7) ENO's commitment to seek up to 100 MW of renewables.⁶¹⁰ The Advisors felt that all of these developments and changes could result in material increases in costs to ratepayers and could alter the ultimate decision of the Council with respect to the project.⁶¹¹ The Advisors state that they requested the alternate case analyses to ensure that the Council had additional current information to inform their decisions on the NOPS proposal and other issues in the near term - decisions that would likely be made prior to the next iteration of the triennial IRP process;⁶¹² and

WHEREAS, the Advisors state that the four additional cases that the Advisors asked ENO to model generally built off what had been the Stakeholder Input Case from the 2015 IRP process with updated assumptions including: (1) a load forecast consistent with the BP16 update; (2) a natural gas price forecast consistent with the BP16 update; (3) an updated CO₂ price forecast; (4) an increase in the renewable capacity to 100 MW; (5) inclusion of the effects of planned and recently completed transmission upgrades; and (6) inclusion of the effects of any planned new generating resources in the region, including the proposed St. Charles Power Station;⁶¹³ and

WHEREAS, the Advisors state that each of the four alternate cases was designed by the Advisors to isolate the impact of an individual decision by changing only one assumption against a common base case so that the cost impact of that individual decision could be identified.⁶¹⁴ The Advisors explain that the three decision points to be tested in the Advisors' requested cases were (1) NOPS versus transmission upgrades; (2) pursuit of the 2% DSM Goal; and (3) impact

⁶¹⁰ Advisors' Post-Hearing Brief at 78, *citing* Rogers-1 at 19:3-21:2.

⁶¹¹ Rogers-1 at 19:3-21:2.

⁶¹² Rogers-1 at 19:3-21:2.

⁶¹³ Rogers-1 at 21:3-13.

⁶¹⁴ Rogers-1 at 21:14-23:20.

of AMI on DSM.⁶¹⁵ However, after reviewing the results of the analyses performed by ENO in response to the request, the Advisors do not recommend that the Council rely upon the outcome of these analyses because (1) they cannot be directly compared to the analyses presented in the Supplemental Application due to the change in the load forecast; (2) they do not contain a scenario with the RICE Alternative; and (3) they only partially take into account the Council's 2% DSM Goal due to ENO's choice to use a breakeven analysis that calculated the level of DSM investment that would result in the same net present value as the base case, rather than analyzing a full implementation of the 2% DSM Goal;⁶¹⁶ and

WHEREAS, the Advisors state they provided further input to ENO prior to its filing of the Supplemental Application as to the minimum level of analysis that should be included in that application.⁶¹⁷ The Advisors sought to ensure that ENO provided the Council with a 20-year economic analysis that (1) included current and consistent assumptions including the Council's 2% DSM Goal; (2) was based on utilizing the AURORA optimization engine and included at least two optimized portfolios with one being the re-sized NOPS alternative (in this manner the Council would have a least cost optimized portfolio to compare with the NOPS proposal); (3) included sensitivities that addressed fuel costs and capacity prices, and (4) included the associated transmission load flow analyses consistent with the economic analyses.⁶¹⁸ The Advisors state that this analysis was designed to partially mimic a portion of the IRP optimization process.⁶¹⁹ However, ENO only partially adhered to the Advisors' recommendations.⁶²⁰ The Advisors argue that the results presented in ENO witness

⁶¹⁵ Rogers-1 at 21:14-23:20.

⁶¹⁶ Advisors' Post-Hearing Brief at 79, *citing* Rogers-1 at 21:14-23:20.

⁶¹⁷ Advisors' Post-Hearing Brief at 79, *citing* Rogers-1 at 24:11-20.

⁶¹⁸ Advisors' Post-Hearing Brief at 80, *citing* Rogers-1 at 24:11-20.

⁶¹⁹ Advisors' Post-Hearing Brief at 80, *citing* Rogers-1 at 24:11-20.

⁶²⁰ Advisors' Post-Hearing Brief at 80, *citing* Rogers-1 at 25:3-8.

Cureington’s Supplemental and Amending Direct Testimony as “requested portfolios” are not actually what the Advisors requested, nor are they based on optimization analyses;⁶²¹ and

WHEREAS, the Advisors note that in addition to the analyses ENO submitted supporting the CT Alternative, in response to the updated load forecast, ENO engaged WorleyParsons to conduct a study regarding the Company’s potential options for a smaller resource.⁶²² The Advisors state that Company looked at potential CT and RICE Alternatives with a net plant output between 106 MW and 128 MW and ultimately concluded that the currently proposed 128 MW RICE Alternative had the lower levelized cost of electricity on a \$/MWh basis as well as other benefits such as low water usage, a low emissions profile, the ability to support renewable resources, and black-start capability;⁶²³ and

WHEREAS, the Advisors thus conclude that the initial analysis indicating that a CT resource should be added to ENO’s portfolio was performed in the 2015 IRP process, but the actual proposal before the Council has been informed by a significant additional amount of analysis and new information that has since become available.⁶²⁴ The Advisors argue that this is appropriate, and indeed necessary, because the IRP is not, and never has been, intended to be a process that gathers sufficient data to approve or deny the acquisition of any specific resource. Rather, the Advisors explain, under the rules in place at the time the Initial Application was filed, the IRP process was intended to provide a framework to help guide ENO in its decisions to (1) develop generation resources and purchase power both individually and in conjunction with its affiliate Operating Companies pursuant to the System Agreement; (2) develop transmission and distribution facilities both individually and in conjunction with its affiliate Operating

⁶²¹ Advisors’ Post-Hearing Brief at 80, *citing* Rogers-1 at 25:3-8.

⁶²² Advisors’ Post-Hearing Brief at 80, *citing* Rogers-1 at 17:2-7.

⁶²³ Advisors’ Post-Hearing Brief at 80, *citing* Rogers-1 at 17:2-7.

⁶²⁴ Advisors’ Post-Hearing Brief at 80.

Companies pursuant to the System Agreement; (3) develop and deploy demand-side resource options and (4) incorporate into its planning process the results of energy efficiency programs developed at the direction of the Council (*e.g.*, Energy Smart New Orleans and others as may subsequently be determined to be applicable).⁶²⁵ The Advisors state that there has never been a requirement that any specific resource acquisition precisely match the IRP results; rather, the IRP rules in effect for the 2015 Final IRP provided that “[t]he Council will consider the Utility’s IRP status reports, implementation of the requirements and the Utility’s success in achieving its objectives in rate-making proceedings that address among other things the prudence of costs incurred by the Utility to construct generation, and purchase and deliver electricity.”⁶²⁶ Moreover, as discussed above, the Council’s resolution regarding the 2015 Final IRP was very clear that acceptance of the 2015 Final IRP Report by the Council would not constitute binding precedent in this case;⁶²⁷ and

WHEREAS, the Advisors note that the Joint Intervenors argue that the Transmission Alternative to NOPS will address the transmission system deficiencies at a considerably lower capital cost than NOPS, and that ENO has not given thorough consideration to adding transmission capacity as an alternative to building NOPS.⁶²⁸ However, the Advisors argue, the Joint Intervenors’ primary witness supporting this assertion, Mr. LanzaLotta, admits that he conducted no independent analysis or study regarding any aspect of the feasibility of competing the transmission upgrades;⁶²⁹ and

⁶²⁵ Advisors’ Post-Hearing Brief at 81, *citing* Resolution No. R-10-142 at 6 (Mar. 25, 2010).

⁶²⁶ Advisors’ Post-Hearing Brief at 81, *citing* Electric Utility Integrated Resource Plan Requirements of the Council of the City of New Orleans, Attachment to Resolution No. R-10-142, at 7.

⁶²⁷ Advisors’ Post-Hearing Brief at 81-82.

⁶²⁸ Advisors’ Post-Hearing Brief at 82, *citing* LanzaLotta-1 at 2:19-3:2.

⁶²⁹ Advisors’ Post-Hearing Brief at 82, *citing* Hr’g Tr. 12/21/17, 76:7-24.

WHEREAS, the Advisors also observe that Joint Intervenors' witness Mr. Fagan, who argues that transmission reinforcement to meet NERC reliability requirements is feasible and more cost-effective than building a new gas-fired power plant⁶³⁰ and who speculates that other steps could be taken to reduce peak load on the system over time, which can have a material effect on the timing requirements for any require transmission reinforcements and ease outage scheduling difficulties,⁶³¹ admitted on cross-examination that when he prepared his testimony, he had not done any studies to determine the feasibility of outage scheduling for transmission lines into the ENO service area for the next 10 years, and that he has never planned or operated transmission in MISO South.⁶³² The Advisors conclude that his speculation as to how easily transmission upgrades can be accomplished appears to lack any foundation;⁶³³ and

WHEREAS, the Advisors conclude that there is simply not enough evidence in the record to demonstrate that the Transmission Alternative is viable.⁶³⁴ The Advisors express significant concerns that the Transmission Alternative is likely significantly more expensive than ENO estimated, and that it will take much longer to solve the transmission reliability issue through transmission upgrades than through adding local generation such as the RICE Alternative;⁶³⁵ and

WHEREAS, the Advisors also observe that ENO witness Cureington testified that portfolios that involve building transmission alone and/or adding renewable capacity are not viable planning alternatives to building a local, dispatchable peaking resource.⁶³⁶ The Advisors note that Cureington testified that he believes that the Total Relevant Supply Costs are

⁶³⁰ Advisors' Post-Hearing Brief at 82, *citing* Fagan-1 at 5:10-6:15; 36:18-38:11.

⁶³¹ Advisors' Post-Hearing Brief at 82, *citing* Fagan-1 at 35:2-36:1.

⁶³² Advisors' Post-Hearing Brief at 83, *citing* Hr'g Tr. 12/19/17, 32:3-15.

⁶³³ Advisors' Post-Hearing Brief at 83, *citing* Hr'g Tr. 12/19/17, 32:3-15.

⁶³⁴ Advisors' Post-Hearing Brief at 83.

⁶³⁵ Advisors' Post-Hearing Brief at 83.

⁶³⁶ Advisors' Post-Hearing Brief at 83, *citing* Cureington-5 at 5:10-13.

understated because his calculations only include transmission upgrades to maintain NERC reliability requirements and do not address either the additional resources required to meet the identified needs of ENO's customers, or market and supply risks.⁶³⁷ The Advisors state that Cureington argues that the Transmission Alternative leaves New Orleans too dependent upon transmission to serve the needs of its customers;⁶³⁸ and

WHEREAS, the Advisors state that their witness Mr. Rogers did conclude that of the cases modeled, the economically preferred alternative appears to be construction of transmission upgrades and 100 MW of solar capacity instead of constructing NOPS.⁶³⁹ However, they add, Mr. Rogers went on to emphasize that the Council should not base its decision in this docket solely on economics and that he believes that reliance on this Transmission Alternative poses potentially excessive risk to ENO's customers.⁶⁴⁰ If the Council determines it will not approve either the CT Alternative or the RICE Alternative, Advisors state that their witness Mr. Movish cautioned that the Transmission Alternative should not be considered as a realistic alternative until such time as ENO files additional information with the Council;⁶⁴¹ and

WHEREAS, the Advisors also inform the Council that the timing, and cost of completion of the necessary transmission upgrades required to resolve ENO's NERC system reliability violations is uncertain.⁶⁴² Further detailed evaluations and cost estimates would be needed prior to final Council approval of such an option, and the Advisors recommend that the Council should consider the current risk of system reliability occurrences that could persist until the transmission upgrades were complete and weigh this risk as compared to the RICE

⁶³⁷ Advisors' Post-Hearing Brief at 83, *citing* Cureington-5 at 29:9-31:15.

⁶³⁸ Advisors' Post-Hearing Brief at 84, *citing* Cureington-5 at 29:9-31:15.

⁶³⁹ Advisors' Post-Hearing Brief at 84, *citing* Rogers-1 at 3:1-9; 50:4-51:4.

⁶⁴⁰ Advisors' Post-Hearing Brief at 84, *citing* Rogers-1 at 3:1-9; 50:4-51:4.

⁶⁴¹ Advisors' Post-Hearing Brief at 84, *citing* Movish-1 at 47:3-9; *see also*, Rogers-1 at 3:1-9; 50:4-51:4.

⁶⁴² Advisors' Post-Hearing Brief at 84, *citing* Vumbaco-1 at 27:9-16.

Alternative and the CT Alternative whose construction completion dates can be comparatively and reliably forecasted and whose costs are comparatively more certain.⁶⁴³ Advisors' witness Vumbaco recommended that, should the Council chose the Transmission Alternative to address the reliability problems that exist today and are expected to continue in the future unless corrected, more information regarding the viability of this alternative is needed and the Council should immediately direct ENO to file with the Council information demonstrating (i) that a transmission only solution to the reliability problems is realistically achievable; (ii) that its proposed upgrade projects can in fact be constructed, (iii) the realistic timing of each project, (iv) the potential impacts of each project's delay on ENO's transmission reliability, and (v) the definitive costs for each project. Such filing should be required within the ensuing six to nine months for its evaluation and final approval prior to its implementation;⁶⁴⁴ and

WHEREAS, the Advisors conclude that alternatives that rely on transmission upgrades may be technically feasible, however, the Advisors have significant concerns regarding the constructability of the Transmission Alternative's transmission upgrades.⁶⁴⁵ The Advisors are also concerned that ENO is uncertain of the feasibility of constructing such transmission upgrades in terms of timing and cost.⁶⁴⁶ The Advisors argue that the Council should carefully weigh the risk to New Orleans related to potential delays in implementing alternatives based on transmission.⁶⁴⁷ While the Transmission Alternative may be the most economically attractive, the Advisors believe it carries significant risks that should be quantified when compared to the CT or RICE Alternatives;⁶⁴⁸ and

⁶⁴³ Advisors' Post-Hearing Brief at 84, *citing* Vumbaco-1 at 27:9-16.

⁶⁴⁴ Advisors' Post-Hearing Brief at 85, *citing* Vumbaco-1 at 7:1-7.

⁶⁴⁵ Advisors' Post-Hearing Brief at 85, *citing* Vumbaco-1 at 23:1-14; Movish-1 at 26:13-14, 46:15-47:24.

⁶⁴⁶ Advisors' Post-Hearing Brief at 85, *citing* Vumbaco-1 at 23:1-14; Movish-1 at 26:10-13, 46:15-47:24.

⁶⁴⁷ Advisors' Post-Hearing Brief at 85, *citing* Vumbaco-1 at 23:1-14; Movish-1 at 29:4-6, 48:5-9.

⁶⁴⁸ Advisors' Post-Hearing Brief at 85, *citing* Vumbaco-1 at 25:7-13.

WHEREAS, the Advisors also recommend that, in addition to the doubtful nature of whether the Transmission Alternative can actually be implemented in time to prevent a significant outage, if at all, it would not be prudent to rely on the MISO capacity market to address ENO's long-term capacity needs.⁶⁴⁹ While the Joint Intervenors argue that ENO should rely upon the MISO capacity market to meet long-term reliability needs, the Advisors state that their argument is based on speculation that future MISO capacity market prices will stay low, a claim that is as unfounded as ENO's speculation that prices will escalate rapidly.⁶⁵⁰ The Advisors state that Joint Intervenors' witness Mr. Fagan argues that ENO understates MISO's resource surplus and overstates MISO's future capacity prices, obscuring the substantial economic risk to New Orleans ratepayers of building a new gas plant that is not needed.⁶⁵¹ However, the Advisors report that Mr. Fagan admitted upon cross-examination that in recommending a transmission-only option with reliance on the MISO capacity market to meet capacity needs, he was not familiar with and did not address or do any analysis of narrow constrained areas within MISO South.⁶⁵² The Advisors also report that Mr. Fagan also did no studies to determine the feasibility of outage scheduling for transmission lines into the ENO service area for the next 10 years.⁶⁵³ Similarly, the Advisors state that Joint Intervenors' witness Dr. Stanton, who argues that ENO could meet its MISO capacity and NERC transmission obligations by purchasing market capacity and that transmission upgrades are less expensive than and provide more resilience than building NOPS,⁶⁵⁴ admitted in cross-examination that she has no training or experience in transmission system planning or utility operations, leaving one to

⁶⁴⁹ Advisors' Post-Hearing Brief at 86, *citing* Rogers-1 at 31:1-2, 15-20, 32:1-7.

⁶⁵⁰ Advisors' Post-Hearing Brief at 86.

⁶⁵¹ Advisors' Post-Hearing Brief at 86, *citing* Fagan-1 at 4:4-5:9; 16:13-32:19.

⁶⁵² Advisors' Post-Hearing Brief at 86, *citing* Hr'g Tr. 12/19/17, 31:10-19.

⁶⁵³ Advisors' Post-Hearing Brief at 86, *citing* Hr'g Tr. 12/19/17, 32:7-12.

⁶⁵⁴ Advisors' Post-Hearing Brief at 86, *citing* Stanton-1 at 7:9-11; 35:6-8; 44:1-7.

wonder upon what she has based her opinion.⁶⁵⁵ Further, the Advisors argue, neither Fagan nor Stanton has done any independent projection of MISO capacity prices,⁶⁵⁶ nor have they done any independent analyses regarding the feasibility of the transmission-only solution;⁶⁵⁷ and

WHEREAS, the Advisors state that it would not be appropriate to rely on the MISO PRA market to meet long-term resource needs and ENO should acquire resources to match load requirements over the long term.⁶⁵⁸ The Advisors argue that the MISO PRA should generally be used to meet limited short-term differences in resources consistent with what the Company has argued;⁶⁵⁹ and

WHEREAS, the Advisors argue that if the Joint Intervenors are correct as to the projected capacity prices remaining low, then the risk to ratepayers is that they will pay too much for ENO to build capacity, when they could have gotten cheaper capacity from the market, while if ENO is correct in its assumptions, ratepayers are subject to the risk of high prices for capacity in the market, and they are also subject to the risk of cascading outages and/or load shedding. The Advisors' assessment is that it is more risky to rely on the MISO capacity market for long-term planning needs than to build generation;⁶⁶⁰ and

WHEREAS, with regard to the Joint Intervenors' arguments that (1) ENO has not examined a sufficient number of other options, such as meeting its capacity and reliability needs through increased investment in energy efficiency and DSM, DG, renewables, and battery storage;⁶⁶¹ (2) ENO should have analyzed additional scenarios, including one that incorporates the most cost-effective levels of energy efficiency, one that assesses a higher-efficiency scenario

⁶⁵⁵ Advisors' Post-Hearing Brief at 86, *citing* Hr'g Tr. 12/21/17, 11:19-22.

⁶⁵⁶ Advisors' Post-Hearing Brief at 86, *citing* Hr'g Tr. 12/19/17, 30:3-19, 31:1-9, Hr'g Tr. 12/21/17, 13:3-15.

⁶⁵⁷ Advisors' Post-Hearing Brief at 86, *citing* Hr'g Tr. 12/19/17, 32:6-15; Hr'g Tr. 12/21/17, 26:4-9.

⁶⁵⁸ Advisors' Post-Hearing Brief at 87, *citing* Rogers-1 at 32:1-8.

⁶⁵⁹ Advisors' Post-Hearing Brief at 87, *citing* Rogers-1 at 34:1-12.

⁶⁶⁰ Advisors' Post-Hearing Brief at 88.

⁶⁶¹ Advisors' Post-Hearing Brief at 88, *citing* Stanton-1 at 6:12-14; 25:1-26:11; 26:12-27:8; 27:9-28:3; Luckow-1 at 25:13-26:2; Fagan-1 at 4:4-5:9; 6:16-7:8; 7:9-16; 7:19-8:5; 10:15-12:3 14:3-15:23; 16:1-12.

combined with the lower estimate of the MISO capacity market's future clearing prices, one with additional solar PV beyond the initial 100 MW in combination with the most cost-effective energy efficiency portfolio; one that would defer or eliminate some of the required transmission reinforcement needs indicated under its reference portfolios, and one that in the near future could include bulk system battery storage resources;⁶⁶² and (3) these resources can help meet peaking needs by reducing overall demand,⁶⁶³ the Advisors do not find the Joint Intervenor's witnesses to be convincing; and

WHEREAS, the Advisors report that in cross-examination Mr. Fagan admitted that when he prepared his testimony in this case, he had not (1) reviewed ENO's 2015 Final IRP or any materials from that proceeding;⁶⁶⁴ (2) run any AURORA production cost models, capacity expansion modeling packages or power flow modeling, (3) performed any economic analysis demonstrating the cost impact to ENO's customers of the different possibilities he mentions; (4) actually proposed any specific basket of resources to meet the identified needs, (5) performed an analysis of how much DSM should be achievable in New Orleans, (6) analyzed the amount of solar capacity that can be located in New Orleans or the DSG load pocket, (7) conducted an independent study to forecast solar PV costs or the expected installation rate of solar in New Orleans, (8) placed a specific number on the amount of DSG that could be guaranteed to be achieved in New Orleans (nor could he do so), (9) done any analysis on the feasibility of installing 200 MW of solar in New Orleans, (10) done any analysis of the economic viability of battery storage in MISO, or (11) analyzed how actions that ENO takes would lower the load or

⁶⁶² Advisors' Post-Hearing Brief at 88, *citing* Fagan-1 at 12:4-14:2.

⁶⁶³ Advisors' Post-Hearing Brief at 88, *citing* Fagan-1 at 24:15-25:1; Stanton-1 at 26:12-27:8.

⁶⁶⁴ Advisors' Post-Hearing Brief at 89, *citing* Hr'g Tr. 12/19/17, 16:20-25.

additional transmission investment would mitigate against the contingencies they're concerned about;⁶⁶⁵ and

WHEREAS, the Advisors also explain that when asked if he would guarantee that renewables and DSM alone would keep the lights on in New Orleans in the event that a storm takes out the transmission grid and leaves New Orleans electrically islanded, Mr. Fagan replied, "No. nobody could."⁶⁶⁶ He also admitted that behind-the-meter solar is not particularly likely to be able to support storm restoration.⁶⁶⁷ The Advisors argue that it is clear that the Joint Intervenors' witness Fagan was not familiar with what options ENO had considered through the 2015 IRP process, nor did he recommend any specific basket of resources, nor had he done any relevant analysis to determine what is actually feasible in New Orleans or at what cost;⁶⁶⁸ and

WHEREAS, the Advisors argue that Joint Intervenors' witness Dr. Stanton admitted on cross-examination she had not done any analysis of her own demonstrating whether the 2% DSM Goal is an achievable goal.⁶⁶⁹ The Advisors also note that Dr. Stanton agreed on cross-examination that if you decrease your load forecast to account for a particular DSM forecast and that DSM forecast does not materialize, customers would be exposed to capacity market price risks⁶⁷⁰ and that the level of savings from AMI is uncertain;⁶⁷¹ and

WHEREAS, the Advisors also report that Dr. Stanton admitted she does not know the location of any of the potential 100 MW of renewables ENO plans to add⁶⁷² and that she also admitted she had not performed any analysis of the expected solar installation rates in New

⁶⁶⁵ Advisors' Post-Hearing Brief at 89, *citing* Hr'g Tr. 12/19/17, 17:22-13, 19:15-23, 21:2-13, 22:8-13, 23:3-6, 25:15-19, 26:6-14, 35:4-23, 35:25-36:6, 36:7-18, 36:19-24, 41:13-25.

⁶⁶⁶ Advisors' Post-Hearing Brief at 89, *citing* Hr'g Tr. 12/19/17, 37:10-16.

⁶⁶⁷ Advisors' Post-Hearing Brief at 89, *citing* Hr'g Tr. 12/19/17, 38:3-6.

⁶⁶⁸ Advisors' Post-Hearing Brief at 89.

⁶⁶⁹ Advisors' Post-Hearing Brief at 90, *citing* Hr'g Tr. 12/21/17, 28:2-6.

⁶⁷⁰ Advisors' Post-Hearing Brief at 90, *citing* Hr'g Tr. 12/21/17, 28:7-13.

⁶⁷¹ Advisors' Post-Hearing Brief at 90, *citing* Hr'g Tr. 12/21/17, 21:25-22:3.

⁶⁷² Advisors' Post-Hearing Brief at 90, *citing* Hr'g Tr. 12/21/17, 22:12-15.

Orleans over the next 20 years or any analysis of the projected costs of behind-the-meter solar in New Orleans, and was not familiar with ENO's net metering rate schedule.⁶⁷³ The Advisors state that she admits that she has no analysis to support the trajectory of behind-the-meter solar growth that she calculated in her Figure 7⁶⁷⁴ and that she did not perform an analysis with respect to the duration that behind-the-meter or utility scale battery storage could provide capacity when needed.⁶⁷⁵ They also report that Dr. Stanton admitted that she did not perform an analysis of the potential costs of either behind-the-meter solar or utility scale battery storage over the 20-year planning horizon, had not analyzed the capacity that either could provide⁶⁷⁶ and has not done any analysis of the amount and price of capacity that might be available for ENO for wind PPAs or whether transmission would be available to import remote wind resources, and does not offer an opinion as to whether importing remote wind capacity into New Orleans would support reliability in the DSG load pocket.⁶⁷⁷ The Advisors report that Dr. Stanton agrees that investment in the distribution system is not a viable alternative to addressing ENO's capacity needs⁶⁷⁸ and that she stated that she did not propose any specific alternative portfolio of resources for the Council to consider.⁶⁷⁹ In short, the Advisors argue, Dr. Stanton offers no viable plan to the Council to meet the identified reliability and capacity needs, she merely offers speculation unsupported by any analysis of what is feasible and achievable in New Orleans as to other options that she thinks might work;⁶⁸⁰ and

WHEREAS, the Advisors do not believe that the specific reliability and peaking capacity needs at issue in this proceeding, including NERC P6 contingencies, can be met by the

⁶⁷³ Advisors' Post-Hearing Brief at 91, *citing* Hr'g Tr. 12/21/17, 23:14-24:4.

⁶⁷⁴ Advisors' Post-Hearing Brief at 91, *citing* Hr'g Tr. 12/21/17, 24:11-20.

⁶⁷⁵ Advisors' Post-Hearing Brief at 91, *citing* Hr'g Tr. 12/21/17, 25:17-22.

⁶⁷⁶ Advisors' Post-Hearing Brief at 91, *citing* Hr'g Tr. 12/21/17, 24:24:22-25:16.

⁶⁷⁷ Advisors' Post-Hearing Brief at 91, *citing* Hr'g Tr. 12/21/17, 25:23-26:18.

⁶⁷⁸ Advisors' Post-Hearing Brief at 91, *citing* Hr'g Tr. 12/21/17, 27:8-11.

⁶⁷⁹ Advisors' Post-Hearing Brief at 91, *citing* Hr'g Tr. 12/21/17, 20:16-21.

⁶⁸⁰ Advisors' Post-Hearing Brief at 91.

types of resources Joint Intervenors advocate, and thus, believe ENO has sufficiently evaluated a reasonable range of resources for the purpose of meeting its identified need.⁶⁸¹ The Advisors note that ENO does continue to examine and pursue other resources, and has committed to adding 100 MW of renewables to its portfolio, but these resources cannot offset the need for local, dispatchable, all-weather generation;⁶⁸² and

WHEREAS, the Advisors state that while they appreciate the desire of the Joint Intervenors to encourage ENO to acquire a greater percentage of its energy from renewable resources, natural gas is still needed to back up those renewables and offset their intermittency to keep the grid stable and reliable.⁶⁸³ The Advisors state that natural gas resources enable greater integration of renewables into the system, and that even Joint Intervenors' witness Fagan stated that customers benefit from natural gas generation, that most anticipated firm additions in MISO over the next 10 years will be gas generation, and that natural gas fired capacity will continue to be an important part of the U.S. energy mix for the foreseeable future;⁶⁸⁴ and

WHEREAS, the Advisors believe that relying upon the analysis in this case as evidence that the identified capacity and reliability needs of New Orleans can be met through a combination of transmission upgrades and other resources such as renewables, DG, energy efficiency, DSM and battery storage is unreasonable and too risky;⁶⁸⁵ and

WHEREAS, the Advisors argue that ENO's inconsistent peak load assumptions as between its transmission studies and economic studies when considering the amount of DSM peak load reductions that would occur with the continued implementation of the Council's 2% DSM Goal, and uncertainty about the appropriate capacity factor of any potential solar

⁶⁸¹ Advisors' Post-Hearing Brief at 91-92.

⁶⁸² Advisors' Post-Hearing Brief at 92.

⁶⁸³ Advisors' Post-Hearing Brief at 94.

⁶⁸⁴ Advisors' Post-Hearing Brief at 95, *citing* Hr'g Tr. 12/19/17, 32:23-33:25, 36:25-37:8.

⁶⁸⁵ Advisors' Post-Hearing Brief at 95.

generation calls into question the veracity of such studies.⁶⁸⁶ The Advisors also note that it has not been shown that constructing or interconnecting solar capacity at or near the Michoud site is feasible.⁶⁸⁷ They state that Mr. Movish's review of ENO's transmission studies indicates that capacity, including solar capacity, must be constructed or otherwise interconnected at the transmission level at or near the Michoud site to beneficially impact ENO's NERC system reliability standards compliance.⁶⁸⁸ Mr. Movish has observed that it is not demonstrated in the instant docket that such solar capacity can be constructed at or near the Michoud site;⁶⁸⁹ and

WHEREAS, Advisors' witness Mr. Movish concludes that the feasibility of solar or wind capacity additions to deliver capacity where needed to resolve ENO's potential NERC system reliability violations (*i.e.*, at or near the Michoud site) is unproven, the Council should give particular consideration to the reality of the assumptions employed in modeling these scenarios as discussed by Mr. Movish and Mr. Vumbaco and weigh the risk associated with these against other alternatives presented.⁶⁹⁰ The Advisors argue that the feasibility of wind capacity to beneficially impact ENO's NERC system reliability standards compliance is undemonstrated because the interconnection of wind capacity at or near the Michoud site has not been shown to be feasible. Mr. Movish notes that certain wind capacity discussed by Intervenors has no transmission path to ENO and therefore would be ineffective in addressing ENO's NERC system reliability standards compliance;⁶⁹¹ and

WHEREAS, the Advisors do not find arguments that a competitive procurement process or all-source RFP is required to be persuasive in the specific context of this case and under the

⁶⁸⁶ Advisors' Post-Hearing Brief at 95, *citing* Vumbaco-1 at 6:18-20.

⁶⁸⁷ Advisors' Post-Hearing Brief at 95, *citing* Vumbaco-1 at 22:4-11.

⁶⁸⁸ Advisors' Post-Hearing Brief at 95, *citing* Vumbaco-1 at 22:4-11; Movish-1 at 31:15-32:3.

⁶⁸⁹ Advisors' Post-Hearing Brief at 96, *citing* Vumbaco-1 at 22:4-11; Movish-1 at 32:6-8.

⁶⁹⁰ Advisors' Post-Hearing Brief at 96, *citing* Vumbaco-1 at 26:20-27:4.

⁶⁹¹ Advisors' Post-Hearing Brief at 96, *citing* Vumbaco-1 at 22:15-20; Movish-1 at 33:22-34:12.

specific circumstances of the need identified by ENO.⁶⁹² Dr. Stanton admits that at the time she filed her testimony, she did not know how long it would take or what it would cost to conduct a competitive procurement, or who would ultimately bear the cost of that.⁶⁹³ She also admitted that an IRP process has the potential to be another method of considering a full set of alternatives.⁶⁹⁴ In addition, the Advisors state that Joint Intervenors' witness Mr. Henderson testified that "[t]here may also be legitimate reasons a utility or utility regulator might determine not to use a competitive procurement process in certain instances. Small procurements, procurements by small utilities, or procurements with very tight requirements, for example, could warrant different treatment."⁶⁹⁵ While the Advisors would also generally prefer that ENO use competitive solicitation processes to acquire resources in this case, the Advisors do believe that the specific reliability needs identified in this case are "very tight requirements" due to the specific geographic needs related to reliability and that there are a somewhat limited number of resources that would be able to meet such requirements. Thus, the Advisors argue that a competitive procurement process is not likely to produce substantially more options able to mitigate the specific the reliability concerns than those options already identified by ENO;⁶⁹⁶ and

WHEREAS, the Council disagrees with NOCS' assertion that ENO can only demonstrate that its decision-making was prudent and reasonable by showing that NOPS is the least-cost option among alternatives. While the Council believes that in most cases, the least-cost option will indeed be the most prudent and reasonable option, economic factors are not the only factors to be considered in determining the public interest. The Council believes that there

⁶⁹² Advisors' Post-Hearing Brief at 97.

⁶⁹³ Advisors' Post-Hearing Brief at 97, *citing* Hr'g Tr. 12/21/17, 30:8-13.

⁶⁹⁴ Advisors' Post-Hearing Brief at 97, *citing* Hr'g Tr. 12/21/17, 30:14-18.

⁶⁹⁵ Advisors' Post-Hearing Brief at 97, *citing* Direct Testimony and Exhibits of Philip Henderson, Docket No. UD-16-02, at 10:7-11 (Oct. 16, 2017) ("Henderson-1").

⁶⁹⁶ Advisors' Post-Hearing Brief at 98.

are other factors that could reasonably cause a prudent utility to choose an option other than the least cost option to address a particular need, such as quality of the technology, reliability concerns, and environmental impacts; and

WHEREAS, the Council disagrees with NOCS' assessment that ENO's application is fatally flawed because ENO failed to conduct an RFP when selecting the NOPS project; and

WHEREAS, the Council considers NOCS' suggestion that the Council initiate a rulemaking to develop RFP rules to be outside the scope of this proceeding, which was established to consider ENO's application for the NOPS Project; and

WHEREAS, the Council disagrees with the Joint Intervenor's argument that without a competitive solicitation process the Council cannot be assured that the price to be paid by ratepayers is reasonable or fair. While the Council agrees that a competitive solicitation process is one of the best methods of assessing what constitutes reasonable market prices for a project, it is not the only means by which the reasonableness of the proposed costs can be assessed. The Council retains its own independent experts with extensive experience in the field, and they have reviewed the project costs and advised the Council that the costs are, in the Advisors' opinion, reasonable;⁶⁹⁷ and

WHEREAS, the Council agrees with the Advisors that while it is generally preferable that a new resource be subject to a competitive procurement process or all-source solicitation, in the context of this case, the narrowly defined needs identified, specifically the need for a dispatchable generation source at the Michoud site, indicate that a competitive procurement or all-source solicitation would not be a prudent use of ratepayer resources because it would be unlikely to yield significantly different options for the Council's consideration, but would be time consuming and expensive; and

⁶⁹⁷ Rogers-1 at 48:3-6.

WHEREAS, the Council finds that given the significant doubts expressed by ENO and the Advisors that the Transmission Alternative is feasible, requiring further exploration of that option would not be a prudent use of ratepayer resources at this time; and

WHEREAS, the Council agrees that when considering ENO's instant reliability needs, relying on remote renewable resources, DSM, and battery storage to solve its reliability problems is not the most prudent course of action. In light of that conclusion, the Council finds that ENO has sufficiently explored those options; and

WHEREAS, the Council disagrees with the Joint Intervenors' premise that prior proceedings have prejudiced this proceeding. While the prior proceedings may have been one of many factors encouraging ENO to explore the addition of a peaking resource in the City, all Council directives to ENO made it clear that any specific resource acquisition proposed by the Company would be subject to a full proceeding evaluating the merits of the proposal and comparing it to other options for meeting the City's electrical needs;⁶⁹⁸ and

WHEREAS, the Council finds that the NOPS proposal, while not a direct result of the 2015 IRP analysis was significantly informed by that analysis. The Council notes that the modification of ENO's recommendations from the 2015 Final IRP to this proceeding primarily reflected new data that was unavailable in the 2015 IRP proceeding. If the Council were bound by the outcome of the AURORA modeling in the 2015 IRP case, then it would be required to order ENO to build or acquire 250 MW of CCGT capacity, regardless of the reduced load forecast that has occurred since the 2015 Final IRP indicating that such a large amount of capacity is no longer projected to be needed. This outcome would not be in the public interest. Indeed, if the position the Joint Intervenors take in this case were true, then neither the Council, nor any other Commission could render decisions regarding the IRP processes of the utilities

⁶⁹⁸ Settlement Agreement at 13-14. Resolution No. R-15-524 at 12.

they regulate without prejudicing every application for the acquisition of resources that utilities subsequently filed; and

WHEREAS, the Council also notes that its decision not to make the outcome of the 2015 IRP binding on subsequent resource acquisitions was taken at the urging of the Alliance for Affordable Energy who were not satisfied with the outcome of the 2015 IRP process and who now as a member of the Joint Intervenors seeks to argue that the NOPS Application must be rejected because it is not consistent with the 2015 Final IRP; and

WHEREAS, the Council rejects the argument that the Settlement Agreement regarding the Entergy System Agreement Termination was conducted outside of public participation or that it was entered into in a non-transparent manner. As is explained above, that Settlement Agreement was the subject of not one but two open, public proceedings, one at FERC and one before the Council. The Joint Intervenors, having not participated in either proceeding, now seek to make a collateral attack on the outcome of those proceedings. It is incumbent upon members of the public who have an interest in energy matters to follow the proceedings of the Council and other agencies that regulate such matters. The Council's proceedings and the proceedings of such other regulatory agencies are open to the public, and a party should not sit upon its rights and then seek to undo the outcome after a proceeding has been completed. Regulators must be able to issue decisions giving utilities guidance, and utilities must be able to rely upon that guidance once the decisions have become final. To allow decisions to continually be undone after the fact by parties who did not participate in the decision would result in regulatory chaos that harms the public interest by impeding the utility's ability to successfully conduct its operations; and

WHEREAS, the Council finds that through the over 21 community meetings, the opportunity for any interested party to intervene and participate in this docket, including by providing testimony in the case, the opportunity for members of the public to make formal comments in the docket at the public hearing as well as the ongoing ability of the public to write and contact their Councilmembers stating their opinion on the matter, the public has had sufficient opportunity for input into the Council's decision regarding ENO's application; and

WHEREAS, as to the Joint Intervenors' argument that the record in this case provides no alternative explanation for the positions taken by ENO and the Advisors other than the Settlement Agreement provision that ENO should examine building 120 MW of peaking capacity in the City, the Council finds this argument to be incorrect on its face. The record contains significant evidence that ENO bases its application on its assessment of the need for capacity, its economic analysis of how to best fill that need, its assessment of its reliability needs, and its engineering assessment of the various technologies available to it. Similarly, there is substantial evidence in the record that the Advisors base their recommendation to the Council in this docket on their own independent analysis of ENO's application, testimony and discovery responses and their conclusions regarding the capacity need, economic analysis and transmission reliability analysis. Moreover, ENO and the Advisors do not take the same position in this case -

- ENO prefers the 226 MW CT and seeks Council approval of that option as its first choice, while the Advisors reject the 226 MW CT and urge the Council to approve the 128 MW RICE Alternative instead. The Joint Intervenors ignore the concerns articulated by both ENO and the Advisors that the economic analysis showing that the Transmission Alternative is the least cost alternative is not properly supported with a full analysis of the costs of that alternative and that the Transmission Alternative would likely take several years longer to implement than either the

CT Alternative or the RICE Alternative, leaving New Orleans ratepayers vulnerable to extensive cascading outages of potentially long duration; and

WHEREAS, while the Joint Intervenors argue that the Council and the Advisors have failed to take any action “to resolve the due process issues that arise from the prior agreement,” the Joint Intervenors, none of whom participated in either the FERC proceeding or the Council proceeding approving the Settlement Agreement make no suggestion as to what steps the Council should take to undo the FERC decision in *Entergy Arkansas, Inc., et al.* 153 FERC ¶ 61,347 (2015) or the Council decision in Resolution No. R-15-524 approving the Settlement Agreement. The Council finds that this argument is an impermissible collateral attack on a FERC Order and a Council Resolution that the Joint Intervenors would like to now undo several years after the fact after failing to exercise their rights to participate in those two dockets. The Council finds that the Joint Intervenors have failed to prove that their due process rights have been violated in this proceeding; and

WHEREAS, for the foregoing reasons, the Council finds that ENO has considered a sufficient range of options to meet the identified need; and

III. Whether ENO’s selection of the Michoud site is reasonable

WHEREAS, ENO argues that the record evidence confirms that the Michoud site is not only reasonable, but ideal for the construction of NOPS for several reasons: (1) because of ENO’s unique planning circumstances, adding capacity at the Michoud site provides the most benefits to ENO’s customers, and of the two sites ENO owns in New Orleans, Michoud had numerous advantages over the other site; (2) NOPS is not anticipated to have adverse effects regarding groundwater or flooding; (3) the air emissions from NOPS will comply with all applicable environmental regulations, which are designed to be protective of public health;

(4) ENO has conducted extensive outreach to engage and inform the community regarding its plans for NOPS; and (5) NOPS will not result in environmental injustice;⁶⁹⁹ and

WHEREAS, ENO's witness Mr. Jonathan Long offered the following summary of why Michoud is the ideal site for NOPS:

[T]here are no residentially zoned properties or residences at the fence line of this site, which is actually unusual in my experience in developing plants in this region. This site has a number of things that are very attractive about it. I understand from Mr. Charles Long that there's a need for power for reliability at this site. The infrastructure that is there in terms of fuel supply, water supply, and transmission interconnection are excellent. And, also, we've owned and operated on this site for at least 50 years and our knowledge of this site is also excellent, which is very much a risk reducing factor. So as sites for new power plants go, all of those things taken into account, this is an excellent site.⁷⁰⁰

WHEREAS, ENO states that there are several unique planning circumstances that indicate that the Company's needs are best addressed with a plant located at the Michoud site:

(1) ENO is located at the far eastern end of the DSG load pocket, which is surrounded by water on three sides and which is itself nestled inside the Amite South load pocket, thus making the region highly reliant on local generation given the limited set of transmission lines to import power from West to East; (2) there is no local generation in the City so ENO is 100% reliant on transmission to serve its load; (3) generation is needed in an exact location, at the Michoud site, to replace the retired Michoud units and accordingly mitigate a host of reliability concerns; and (4) 100% of the Company's load is inside MISO LRZ 9, while the vast majority of ENO's generation is located outside LRZ 9, which exposes customers to the potential for separation of MISO capacity market prices;⁷⁰¹ and

⁶⁹⁹ ENO Post-Hearing Brief at 99.

⁷⁰⁰ ENO Post-Hearing Brief at 99, *citing* Hr'g Tr. 12/18/17, 127.

⁷⁰¹ ENO Post-Hearing Brief at 100, *citing* Cureington-6 at 22-23, Cureington-8 at 8-12, 57.

WHEREAS, ENO argues that the Michoud site had several advantages over the other site owned by ENO in New Orleans, A.B. Paterson. ENO explains that Michoud is located close to three major gas pipelines, has existing office building infrastructure, and has available bays in the high-voltage switchyard for interconnection to the transmission system. In addition, and most importantly, ENO argues, the Michoud site is more strongly interconnected to the transmission system in the Company's service area and the DSG load pocket than is the Paterson Site, meaning that placing NOPS at Michoud would have many more positive effects on transmission reliability in the DSG load pocket than other locations, including Paterson; and

WHEREAS, ENO argues that siting the plant at Michoud will have no adverse effects regarding groundwater withdrawal or flooding, and that the evidence in the record includes independent and industry-accepted analyses, which prove that neither the CT Alternative nor the RICE Alternative will increase subsidence in New Orleans.⁷⁰² ENO witness Dr. George Losonsky, a recognized expert in the scientific community with a Ph.D. in hydrology and over 30 years of experience in water resource risk management and problem solving testified as follows:

My independent evaluation involved the use of geotechnical/hydrogeological conceptual site models as well as drawdown and consolidation calculations, the latter of which provides the Council with a conservative, scientific quantification of the worst-case scenario of the possible impacts of groundwater usage associated with NOPS for 50 years of operating the plant. These analyses are on par with, and in some cases above and beyond, industry standards or any analysis if groundwater usage impact assessments and they support my independent and sworn representations to the Council that (i) neither of the proposed NOPS units will increase or contribute to subsidence in New Orleans East or the surrounding areas, (ii) neither unit will cause differential settlement, and consequently, (iii) neither unit will pose any risk to the integrity of the

⁷⁰² ENO Post-Hearing Brief at 101.

area infrastructure, including the HSDRRS or other flood protection infrastructure;⁷⁰³

WHEREAS, ENO explains that in his worst-case scenario calculations, Dr. Losonsky assumed that the units would be withdrawing the maximum amount of groundwater required for operation 365 days per year and 24 hours per day, despite the fact that neither alternative would operate at that frequency or withdraw water at that level, which, ENO explains, means his calculations do provide a conservative, worst-case scenario prediction of risks.⁷⁰⁴ ENO explains his calculations are even more conservative because where, like at Michoud, groundwater pumping has occurred for years, there is less potential for further consolidation and settlements, but Dr. Losonsky assumed for the purposes of his calculations that there had been no prior pumping at the site, so his calculations overstate the possible impacts of pumping, and still show the worst-case possible impacts to be less than *de minimis*;⁷⁰⁵ and

WHEREAS, ENO states that Dr. Losonsky is also a former Commissioner of the South Louisiana Flood Protection Authority-East (“SLFPA-E”) and assisted the SLFPA-E in its efforts to implement the Hurricane and Storm Damage Risk Reduction System (“HSDRRS”).⁷⁰⁶ As such, ENO argues, Dr. Losonsky is the only witness in the proceeding qualified to provide an opinion on whether the proposed location and operation of NOPS creates any risks to the integrity of the various HSDRRS measures and other similar flood protection infrastructure.⁷⁰⁷ Dr. Losonsky testified that he does not believe that siting and operating either NOPS alternative would create any risk of damage to the integrity of the HSDRRS flood protection components or any other infrastructure in New Orleans East or the New Orleans metro area;⁷⁰⁸ and

⁷⁰³ ENO Post-Hearing Brief at 101-102, *citing* Losonsky-2 at 20.

⁷⁰⁴ ENO Post-Hearing Brief at 102, *citing* Losonsky-1, Ex. GL-2 at 8, Losonsky-2 at 11.

⁷⁰⁵ ENO Post-Hearing Brief at 102-103, *citing* Losonsky-1 at 15-16, Losonsky-2 at 6.

⁷⁰⁶ ENO Post-Hearing Brief at 103-104, *citing* Losonsky-1 at 4-5, 23.

⁷⁰⁷ ENO Post-Hearing Brief at 104, *citing* Losonsky-2 at 19.

⁷⁰⁸ ENO Post-Hearing Brief at 104, *citing* Losonsky-2 at 19.

WHEREAS, ENO argues that evidence in the record from multiple witnesses and independent third parties demonstrates that siting NOPS as ENO has proposed would not subject the unit to undue flood risks.⁷⁰⁹ ENO argues that as ENO witness Mr. Jonathan Long testified, design elevations for the proposed site and improvements to area flood protection infrastructure, including the HSDRRS, serve to mitigate the factors that caused the site to experience flooding due to the overtopping of levees during Hurricane Katrina.⁷¹⁰ As a result of the improvements, ENO argues, the proposed NOPS site is extremely well-protected against the flood risks that affect the entire Gulf Coast Region, as well as New Orleans specifically and that this, along with many other factors, make the proposed site an ideal location for critical storm-response infrastructure like NOPS;⁷¹¹ and

WHEREAS, ENO argues that (1) the decommissioning and damming of the Mississippi River Gulf Outlet; (2) the installation of the world's largest surge barrier, the Lake Borgne Surge Barrier; (3) the construction of St. Bernard Parish levee floodwalls on either side of the Lake Borgne Surge Barrier; and (4) the completion of the Seabrook Floodgate on Lake Pontchartrain surround the proposed NOPS site and will prevent the type of flooding that occurred at Michoud during Katrina where water pushing up the Mississippi River Gulf Outlet into the Gulf Intracoastal Waterway and a storm surge from Lake Pontchartrain also causing water to enter into the Gulf Intracoastal Waterway caused the water in the Gulf Intracoastal Waterway to overtop the levees at the Michoud site.⁷¹² ENO also argues that the combination of these improvements contributed to the Coastal Protection Restoration Authority's ("CPRA") 2017 Master Plan predicting no flooding at the proposed NOPS site under the worst case storm

⁷⁰⁹ ENO Post-Hearing Brief at 108.

⁷¹⁰ ENO Post-Hearing Brief at 108, *citing* J. Long-3 at 19-20.

⁷¹¹ ENO Post-Hearing Brief at 108.

⁷¹² ENO Post-Hearing Brief at 109, *citing* J. Long-3 at 19-22, Ex. JEL-9.

scenario modeled for the CPRA 2017 Master Plan during the 50-year assumed life of NOPS;⁷¹³ and

WHEREAS, ENO argues that in addition to the protections offered by the HSDRRS, the NOPS project team took additional steps in the design and planning for NOPS to minimize the risk of NOPS being impacted by flooding, because the Company uses a Top of Concrete elevation in its design plans that exceeds FEMA guidance for the Michoud site in that it is 2.5 feet higher than the FEMA advisors recommendation.⁷¹⁴ ENO argues that it has demonstrated that ENO is in compliance with the requirements of the City Council Ordinance No. 26906⁷¹⁵ on flooding as well as all FEMA guidance, and all local regulations;⁷¹⁶ and

WHEREAS, ENO argues that its Risk & Insurance Management group arranged a tour for the Company's insurance underwriters and underwriters' engineers of the proposed NOPS site and the HSDRRS to allow them to evaluate the risk of issuing insurance for NOPS and to demonstrate to the group that hurricane and storm damage risk associated with ENO's portfolio of assets had been gradually reduced by the installation of the HSDRRS system.⁷¹⁷ ENO states that upon completion of the site visit and tour, the insurance underwriters conveyed to ENO's Risk & Insurance Management Group that, not only were they much more comfortable with insuring ENO's portfolio of assets, but they also felt that any flood risks to NOPS would be minimal given HSDRRS and the fact that the Top of Concrete Elevation would be 3.5 feet above sea level;⁷¹⁸ and

⁷¹³ ENO Post-Hearing Brief at 109, *citing* Losonsky-2 at 11.

⁷¹⁴ ENO Post-Hearing Brief at 111-113.

⁷¹⁵ Council of the City of New Orleans, Ordinance No. 26906 (Apr. 7, 2016).

⁷¹⁶ ENO Post-Hearing Brief at 112-113, *citing* J. Long-3 at 17-18 and Hr'g Tr. 12/20/17, 93-94.

⁷¹⁷ ENO Post-Hearing Brief at 114-115, *citing* J. Long-3 at 18-19.

⁷¹⁸ ENO Post-Hearing Brief at 115, *citing* J. Long-3 at 19.

WHEREAS, ENO argues that with respect to air emissions, the evidence shows that NOPS will be safe in every respect.⁷¹⁹ ENO notes that it must submit an application to the LDEQ, and the LDEQ will perform an intense review of that application to ensure the plant complies with all state and federal environmental standards and regulations and to ensure that the plant will be operated safely without adverse health effects to the community.⁷²⁰ ENO argues that the permitted emissions of the plant will be significantly less than the permitted emissions of the natural gas plant that operated at that same site for over 50 years, and that air dispersion modeling performed in this proceeding by experts clearly demonstrates that there will be no adverse health effects on the surrounding community as a result of air emissions from the new facility.⁷²¹ ENO states that it will construct and operate NOPS safely and in accordance with all applicable state and federal environmental regulations and without any adverse effects on the health of Orleans Parish residents or anyone else;⁷²² and

WHEREAS, ENO argues that the LDEQ has been designated as the primary agency in the state concerned with environmental protection and regulation,⁷²³ and that the LDEQ is charged with, *inter alia*, the regulation of air quality in Louisiana and ensuring compliance with federal environmental legislation such as the CAA.⁷²⁴ ENO explains that it must obtain a preconstruction and operating permit from the LDEQ prior to beginning construction and that the LDEQ will review ENO's application submittal to assure that no adverse air quality impacts would result from the project and identify all applicable state and federal regulations and standards for the proposed equipment.⁷²⁵ Therefore, ENO argues, before ENO can even begin

⁷¹⁹ ENO Post-Hearing Brief at 115-116.

⁷²⁰ ENO Post-Hearing Brief at 116.

⁷²¹ ENO Post-Hearing Brief at 116.

⁷²² ENO Post-Hearing Brief at 116.

⁷²³ ENO Post-Hearing Brief at 116, *citing* La. Rev. Stat. § 30:2011 (2016).

⁷²⁴ ENO Post-Hearing Brief at 117.

⁷²⁵ ENO Post-Hearing Brief at 117.

construction of NOPS, the LDEQ -- the state agency statutorily authorized and constitutionally entrusted with the task -- will perform the preconstruction review and the review of all state and federal air quality requirements that will apply to operation of the facility;⁷²⁶ and

WHEREAS, ENO argues that as its air emissions and permitting expert witness Ms. Higgins testified, each NOPS alternative will result in substantial decreases in permitted (allowable) emission as compared to the currently permitted Michoud Power Plant.⁷²⁷ ENO testifies that the anticipated permitted emissions for each pollutant for the NOPS alternatives are at least 48% below the corresponding permitted emissions for the former Michoud units, and in several cases are over 95% lower than those permitted emissions;⁷²⁸ and

WHEREAS, ENO argues that because Orleans Parish is in attainment with all of the NAAQS, meaning air quality in the parish meets all federal air quality standards, only the CAA's New Source Review program (referred to as the Prevention of Significant Deterioration ("PSD") program) for attainment areas would apply to the NOPS alternatives.⁷²⁹ This program is designed to help ensure that states maintain compliance with the federal air quality standards and prevent any deterioration of air quality in attainment areas.⁷³⁰ ENO explains that under the PSD regulations, each NOPS alternative would be considered a "minor modification" to the existing stationary source (*i.e.*, the Michoud plant) because the net emissions increase from each, when combined with other creditable emissions increases and decreases occurring during a

⁷²⁶ ENO Post-Hearing Brief at 118.

⁷²⁷ ENO Post-Hearing Brief at 118, *citing* Higgins-1 at 17-19.

⁷²⁸ ENO Post-Hearing Brief at 118-120, *citing* Higgins-1 at 17-19.

⁷²⁹ ENO Post-Hearing Brief at 120-121, *citing* Higgins-1 at 21-22.

⁷³⁰ ENO Post-Hearing Brief at 121, *citing* Higgins-1 at 21-22.

contemporaneous period, are below the level of emissions increases that the EPA has determined to be *de minimis* with regard to their potential for adversely impacting air quality;⁷³¹ and

WHEREAS, ENO argues that because it is considered a “minor modification” and therefore the level of increases are considered *de minimis*, ENO is not required to perform the air quality analytics that would be required for a major modification to obtain a permit.⁷³² However, ENO nevertheless retained emissions dispersion modeling experts from C-K Associates to perform such modeling to further prove that air quality in the surrounding area would not be adversely affected by the operation of NOPS;⁷³³ and

WHEREAS, ENO argues that LDEQ assesses and incorporates into the draft permit applicable emission control requirements, emission limitations, work practices, monitoring, recordkeeping and reporting requirements based on the type of equipment, or activities proposed and the level of potential emissions from the equipment and that minor modifications projects are still subject to these requirements.⁷³⁴ ENO explains the LDEQ (1) is responsible for reviewing the emissions calculations, (2) establishes specific allowable mass emission rates through the permitting process; (3) reviews the application with regard to pollutants not addressed by the NAAQS; (4) may choose to perform dispersion modeling of the proposed emissions; and (5) has broad authority to incorporate into the permit any conditions the agency deems reasonable and necessary to protect air quality;⁷³⁵ and

⁷³¹ ENO Post-Hearing Brief at 121, *citing* Higgins-1 at 23, 27, Implementation of the New Source Review (“NSR”) Program for Particulate Matter Less than 2.5 Micrometers (PM_{2.5}), EPA, Final Rule, 73 Fed. Reg. 28,332 (May 16, 2008).

⁷³² ENO Post-Hearing Brief at 121-122.

⁷³³ ENO Post-Hearing Brief at 122.

⁷³⁴ ENO Post-Hearing Brief at 122, *citing* Higgins-1 at 28-29.

⁷³⁵ ENO Post-Hearing Brief at 122-123, *citing* Higgins-1 at 28-29 and La. Admin. Code § 33:III.501.C.6.

WHEREAS, ENO also argues that the air quality evaluation performed by C-K Associates further proves that there will be no adverse impacts on air quality from NOPS.⁷³⁶ ENO explains that C-K Associates employed the EPA-preferred AERSCREEN air dispersion model to perform screening analysis estimates of downwind ambient concentration of air pollutants emitted from the CT and RICE Alternatives.⁷³⁷ ENO reports that the AERSCREEN modeling performed for the CT and RICE Alternatives revealed that the air emissions for the CT and RICE Alternatives were well below the NAAQS for all modeled pollutants;⁷³⁸ and

WHEREAS, ENO argues it has conducted extensive public outreach efforts and afforded meaningful opportunity for public participation.⁷³⁹ ENO states that during the 2015 IRP process it hosted six public technical conferences and ran additional simulations and incorporated stakeholder feedback and that the Council offered additional opportunities for public review and comment on the 2015 Final IRP as well, with an additional technical conference, comments from intervenors and a public hearing.⁷⁴⁰ ENO also argues that after its initial NOPS filing, the Council and ENO again provided multiple opportunities for public participation.⁷⁴¹ ENO met with community groups, neighborhood associations, and other civic associations.⁷⁴² ENO states that the Council ordered ENO to file supplemental testimony on environmental issues raised by community members, with which ENO complied, provided an opportunity for Intervenors to file testimony, ordered ENO to hold public hearings and held a hearing in its chambers.⁷⁴³ ENO states that it exceeded the Council's order holding four meetings in New Orleans East with

⁷³⁶ ENO Post-Hearing Brief at 123, *citing* J. Long-3, Ex. JEL-6 at 15.

⁷³⁷ ENO Post-Hearing Brief at 123, *citing* J. Long-3, Ex. JEL-6 at 15.

⁷³⁸ ENO Post-Hearing Brief at 123-124, *citing* J. Long-3, Ex. JEL-6 at 15.

⁷³⁹ ENO Post-Hearing Brief at 128-129.

⁷⁴⁰ ENO Post-Hearing Brief at 129.

⁷⁴¹ ENO Post-Hearing Brief at 129.

⁷⁴² ENO Post-Hearing Brief at 129.

⁷⁴³ ENO Post-Hearing Brief at 129, *citing* Cureington-8 at 87.

handouts in English, Spanish and Vietnamese.⁷⁴⁴ ENO's witness Mr. Cureington testified that ENO has held at least 21 public meetings and Mr. Rice testified that he believes the number of public hearings is closer to 30 and that he personally participated in nearly all of those meetings;⁷⁴⁵ and

WHEREAS, Air Products submits that the Michoud location is the only logical and available choice for siting the NOPS unit.⁷⁴⁶ Air Products explains that the Michoud site has the necessary infrastructure, including the transmission interconnection that is critical to the integration of any generation and that in proposing the site, ENO was complying with Resolution No. R-15-524;⁷⁴⁷ and

WHEREAS, NOCS states that the siting of any new facility was not the focus of its review of the issues in this proceeding, but should the Council approve the RICE Alternative, ENO's Michoud site appears to be reasonable for its location.⁷⁴⁸ NOCS explains that the Michoud site appears to possess sufficient space and necessary transmission interconnection facilities;⁷⁴⁹ and

WHEREAS, the Joint Intervenors argue that the selection of the Michoud site is unreasonable for the operation of a proposed gas-fired plant for the following reasons: (1) New Orleans residents would suffer from the massive amounts of harmful air pollution released by the proposed gas plants; (2) new flood control infrastructure protecting New Orleans East and Ninth Ward that is next to the Michoud site would have the added risk of being weakened by accelerated land subsidence caused by groundwater withdrawals for the proposed gas plant

⁷⁴⁴ ENO Post-Hearing Brief at 129-130, *citing* Cureington-8 at 88.

⁷⁴⁵ ENO Post-Hearing Brief at 130, *citing* Cureington-8 at 89-90, Hr'g Tr. 12/20/17, 131.

⁷⁴⁶ Air Products Post-Hearing Brief at 14.

⁷⁴⁷ ENO Post-Hearing Brief at 14-15, *citing* Lovorn-1 at 8:14-19.

⁷⁴⁸ NOCS Post-Hearing Brief at 26.

⁷⁴⁹ NOCS Post-Hearing Brief at 26.

options; (3) the proposed gas plants would each create racially disproportionate pollution and flood risk burdens on nearby African American and Vietnamese American neighborhoods, which have been disregarded by ENO; (4) FEMA has determined that the location chosen on the Michoud site for the proposed gas plants has a high incidence of flood events, and cautions against building new power plants in such locations; (5) ENO has developed a deeply flawed design for the proposed gas plants that completely fails to ensure compliance with the City of New Orleans Flood Damage Prevention Ordinance as well as FEMA policy and standards applicable to new construction of power plants; and (6) ENO only considered Michoud and A.J. Paterson as potential sites for a proposed gas plant, and did not consider other sites as directed by Council Resolution No. R-15-524;⁷⁵⁰ and

WHEREAS, the Joint Intervenors argue that each of ENO's proposed gas-fired generation options would create racially disproportionate environmental burdens on predominately African American and Vietnamese neighborhoods in New Orleans East.⁷⁵¹ They allege that each would annually release significant amounts of air pollution near homes and schools and that the CT Alternative would also create significant flood risks that can impact the same surrounding neighborhoods which have yet to fully recover from the levee failure during Hurricane Katrina;⁷⁵² and

WHEREAS, the Joint Intervenors state that their witness, Dr. Wright, analyzed the 1950 U.S. Census data, which indicates a plan to operate the Michoud power plant in a remote location in New Orleans East that was away from neighborhoods and at that time, New Orleans East was mostly undeveloped with a sparse population of approximately 8,000 people.⁷⁵³ The

⁷⁵⁰ Joint Intervenors' Post-Hearing Brief at 103.

⁷⁵¹ Joint Intervenors' Post-Hearing Brief at 68.

⁷⁵² Joint Intervenors' Post-Hearing Brief at 68.

⁷⁵³ Joint Intervenors' Post-Hearing Brief at 68, 80-81, *citing* Wright-1 at 13:7-15.

Joint Intervenors argue that the 2010 Census data reflect the population growth in New Orleans East, which is now home to approximately 64,000 people, of whom 84% are African American and 8% are Vietnamese American.⁷⁵⁴ The Joint Intervenors also argue that the population of New Orleans East has grown with residential developments extending to a distance that is less than one mile from the Michoud site boundary;⁷⁵⁵ and

WHEREAS, the Joint Intervenors claim that ENO provided a false statement in its 2004 Environmental Assessment Statement to the LDEQ that there are no homes or schools in the vicinity of the Michoud site.⁷⁵⁶ The Joint Intervenors argue that for years, ENO has operated the Michoud power plant in complete disregard of its racially disproportionate environmental burdens on predominately African-American and Vietnamese-American residents;⁷⁵⁷ and

WHEREAS, the Joint Intervenors argue that in its application, ENO does not examine, or even consider, the racially-disproportionate environmental burdens of operating a power plant in close geographic proximity to predominately African-American and Vietnamese-American neighborhoods.⁷⁵⁸ The Joint Intervenors take issue with ENO's representation that "no people live within a one mile radius of the center of the Michoud site "because ENO measures from the center of the Michoud site rather than from the perimeter."⁷⁵⁹ The Joint Intervenors argue that ENO should have used a three-mile radius, which they argue is typically used for environmental justice analysis of polluting facilities that are nearby populations;⁷⁶⁰ and

WHEREAS, the Joint Intervenors argue that ENO's pollution estimates have not been confirmed by the LDEQ and do not include the amounts of sulfuric acid mist that would be

⁷⁵⁴ Joint Intervenors' Post-Hearing Brief at 68, 81, *citing* Wright-1 at 13:11-14:1.

⁷⁵⁵ Joint Intervenors' Post-Hearing Brief at 68.

⁷⁵⁶ Joint Intervenors' Post Hearing Brief at 69, *citing* Wright-2 at 7-8 and Ex. 1.

⁷⁵⁷ Joint Intervenors' Post-Hearing Brief at 69.

⁷⁵⁸ Joint Intervenors' Post-Hearing Brief at 69.

⁷⁵⁹ Joint Intervenors' Post-Hearing Brief at 69.

⁷⁶⁰ Joint Intervenors' Post-Hearing Brief at 69.

released into the air or the types and amounts of toxins that would be discharged as water pollution, but that nevertheless ENO's pollution estimates do indicate that ambient air quality will worsen with the air pollution from NOPS;⁷⁶¹ and

WHEREAS, the Joint Intervenors argue that it is insufficient for ENO to obtain the required permits to release air pollution because the Council directed ENO to address "the air quality effects of the proposed New Orleans Power Station," and obtaining air permits to release pollution will cause air quality to worsen.⁷⁶² The Joint Intervenors argue that the effects of poor air quality across Louisiana arise from permitted air pollution, and that ENO's expert witness Higgins, a former LDEQ employee, acknowledged that her previous approvals of air permits issued to major industrial facilities operating in Louisiana's infamous Cancer Alley;⁷⁶³ and

WHEREAS, the Joint Intervenors argue that their witness, Dr. Thurston, is the only witness to address the health effects of air pollution and that air pollution causes cancer and impaired respiratory and cardiovascular function.⁷⁶⁴ The Joint Intervenors argue that Dr. Thurston's testimony shows that air pollution from sources like power plants is associated with serious adverse human health effects.⁷⁶⁵ The Joint Intervenors argue that the health effects of permitted air pollution released by power plants lays bare the reality recognized by Louisiana courts that "a regulatory standard and a guarantee of safety are not synonymous;"⁷⁶⁶ and

WHEREAS, the Joint Intervenors argue that ENO's assertion that either NOPS alternative will meet minimum federal standards is not going to be much comfort to the residents who actually have to breathe pollution from the plant, and that it is incorrect because the

⁷⁶¹ Joint Intervenors' Post-Hearing Brief at 70, *citing* Higgins-1 at 18-19.

⁷⁶² Joint Intervenors' Post-Hearing Brief at 70, *citing* Resolution No. R-16-506.

⁷⁶³ Joint Intervenors' Post-Hearing Brief at 70-71, *citing* Hr'g Tr. 12/19/17, 64:2-5.

⁷⁶⁴ Joint Intervenors' Post-Hearing Brief at 71, 77-79, *citing* Thurston-1 at 5-8, Thurston-2 at 8.

⁷⁶⁵ Joint Intervenors' Post-Hearing Brief at 77, *citing* Thurston-1 at 3.

⁷⁶⁶ Joint Intervenors' Post-Hearing Brief at 71, *citing* *Johnson v. Orleans Parish School Board*, 975 So. 2d 678, 711 (La. App. 4th Cir. 2008).

pollutants will exceed the EPA PSD levels at which increased pollution from an existing stationary source in an attainment area would trigger specific requirements for emissions control and analysis;⁷⁶⁷ and

WHEREAS, the Joint Intervenors argue that the poor are especially at risk from air pollution, and older adults and children are also at greater risk;⁷⁶⁸ and

WHEREAS, the Joint Intervenors argue that there are two known characteristics of natural gas-fired power plant particulate matter that make them likely to have especially strong adverse health effects, on a per-pound basis: they have a higher percentage of ultrafine particles as compared to PM from other fossil fuel sources and they contain a high percentage of toxic transition metals;⁷⁶⁹ and

WHEREAS, the Joint Intervenors argue that ENO's response that as a technical matter the gas plant can avoid more stringent review and will meet the minimum air quality standards set by the EPA ignores the fact EPA's standards do not remove the risk to neighbors of the plant;⁷⁷⁰ and

WHEREAS, the Joint Intervenors argue that rather than being a part of a regulatory framework designed to protect people from the harms associated with pollution emissions, the EPA distinction between a major or minor modification is simply a regulatory construct designed for administrative ease in determining the baseline that triggers certain kinds of review when a permit is issued.⁷⁷¹ They also argue that the CAA's ambient air quality standards also focus on maintaining region-wide air quality, not on addressing pollution impact to specific communities

⁷⁶⁷ Joint Intervenors' Post-Hearing Brief at 76-77.

⁷⁶⁸ Joint Intervenors' Post-Hearing Brief at 79, *citing* Thurston-1 at 25.

⁷⁶⁹ Joint Intervenors' Post-Hearing Brief at 79-80, *citing* Thurston-1 at 28.

⁷⁷⁰ Joint Intervenors' Post-Hearing Brief at 80.

⁷⁷¹ Joint Intervenors' Post-Hearing Brief at 80.

near a plant's fence line like those in New Orleans East.⁷⁷² The Joint Intervenors argue that to protect the public interest, the Council should adopt a "baseline" level to judge proposed projects' effect on New Orleans East that reflects existing physical conditions.⁷⁷³ They argue that as a result of ENO's decision to close the old Michoud units in 2016, there are no power-plant emissions from the Michoud site and that the proposed projects will result in substantial increases in pollution emissions from the current status quo;⁷⁷⁴ and

WHEREAS, the Joint Intervenors urge the Council to reject the assertion of ENO's consultant, C-K Associates, that emissions are dissipated before they reach the fence line to concentrations much below the limits for public breathing level air because C-K Associates cites no evidence or analysis for this conclusion and cannot support this claim because PM_{2.5} can travel hundreds or thousands of miles.⁷⁷⁵ The Joint Intervenors argue that even if the emissions dissipate at the fence line, the limits established by the NAAQS are not fully protective of public health.⁷⁷⁶ The Joint Intervenors argue that particularly in this instance where clean options such as solar and energy efficiency are readily available, the Council should select that option that preserves public health rather than the option which puts public health at greater risk of serious disease and death;⁷⁷⁷ and

WHEREAS, the Advisors argue that the Michoud site is a reasonable choice, given the identified need;⁷⁷⁸ and

WHEREAS, the Advisors argue that ENO has identified a specific need for generation resources to be installed in the eastern part of the City in order to alleviate certain identified

⁷⁷² Joint Intervenors' Post-Hearing Brief at 80.

⁷⁷³ Joint Intervenors' Post-Hearing Brief at 80.

⁷⁷⁴ Joint Intervenors' Post-Hearing Brief at 80.

⁷⁷⁵ Joint Intervenors' Post-Hearing Brief at 81, *citing* J. Long-2, Ex. JEL-6 at 16, *Catawba County, North Carolina v. EPA*, 571 F.3d 20, 26 (D.C. Cir. 2009).

⁷⁷⁶ Joint Intervenors' Post-Hearing Brief at 81-82.

⁷⁷⁷ Joint Intervenors' Post-Hearing Brief at 81.

⁷⁷⁸ Advisors' Post-Hearing Brief at 98.

transmission problems and that installing generation to the west would not sufficiently mitigate the need.⁷⁷⁹ The Advisors argue that because such a large amount of generation (781 MW of capacity) around which the ENO system had been designed, putting some level of generation back at or near that location will help support the system in a manner that putting generation in other locations will not;⁷⁸⁰ and

WHEREAS, Advisors' witness Mr. Movish testified that locating local generation at Michoud would have a direct transmission path to eliminate the transmission overloads that would result in the event of the P6 contingency and support ENO's ability to continue to reliably serve its customers.⁷⁸¹ Mr. Movish also opines that the alternate location of local generation, such as in the western portion of ENO's system would not support ENO's ability to reliably serve its load and mitigate transmission reliability violations because the occurrence of a P6 contingency would sever the interface between ENO's 115 kV and 230 kV networks, thereby eliminating the transmission path needed to mitigate it, and as a result, such generation would not support ENO's ability to continue to serve its customer loads;⁷⁸² and

WHEREAS, the Advisors argue that to the extent that generation is to be sited in the eastern part of the City in order to maintain reliability, the Michoud site has several advantages that benefit ENO customers, including customers in New Orleans East: (1) ENO already owns the property, saving ratepayers the expense of acquiring it; (2) it already has a significant amount of necessary infrastructure in place, including gas pipeline and transmission and distribution lines running into the site, and administrative building facilities that will result in substantial cost savings; (3) ENO already has several permits applicable to the site that allow it to streamline the

⁷⁷⁹ Advisors' Post-Hearing Brief at 98, *citing* Cureington-5 at 21:3-22:5, Movish-1 at 25:3-9, and C. Long-3 at 16:16-17:4.

⁷⁸⁰ Advisors' Post-Hearing Brief at 98-99, *citing* Rice-1 at 3:7-8.

⁷⁸¹ Movish-1 at 24:17-20.

⁷⁸² Movish-1 at 25:39.

permitting process; and (4) it is in a sparsely populated, industrial area where a plant had previously operated successfully for decades;⁷⁸³ and

WHEREAS, the Advisors note that there are also other positive impacts on the community of constructing NOPS – ENO submitted an economic analysis demonstrating that either Alternative would produce hundreds of millions of dollars in economic benefits in the form of new business sales, new household earnings, new permanent jobs and new tax collections, both from construction and operation.⁷⁸⁴ The Advisors argue that the economic study demonstrated that the RICE Alternative would provide even greater benefits than the CT Alternative from ongoing operational expenditures that will continue to accrue for as long as NOPS is in operation;⁷⁸⁵ and

WHEREAS, the Advisors assert that the C-K Report submitted by ENO along with the testimony of Dr. Losonsky and the CB&I Report, demonstrated that the proposed units will not contribute to additional subsidence at Michoud and that flood risks have been substantially mitigated.⁷⁸⁶ The Advisors found that the authors of the two reports performed extensive analysis and demonstrated that the proposed groundwater withdrawals for the CT Alternative and RICE Alternative would be too small to contribute to any subsidence in the Michoud area;⁷⁸⁷ and

WHEREAS, the Advisors note that when compared to the deactivated Michoud units, the alternative recommended by the Advisors, the RICE Alternative, usage rate will result in a 99.9% reduction in groundwater use.⁷⁸⁸ The Advisors are persuaded by this evidence and find it

⁷⁸³ Advisors' Post-Hearing Brief at 99, *citing* J. Long at 41:21-42:10, Rice-4 at 16:10-12.

⁷⁸⁴ Advisors' Post-Hearing Brief at 99, *citing* Rice-4 at 18:9-19:5, Ex. CLR-3.

⁷⁸⁵ Advisors' Post-Hearing Brief at 99, *citing* Rice-4 at 18:9-19:5, Ex. CLR-3.

⁷⁸⁶ Advisors' Post-Hearing Brief at 100-108.

⁷⁸⁷ Advisors' Post-Hearing Brief at 100-101, *citing* Losonsky-1 at 8:12-14, 17:19-22, Ex. GL-3, J. Long-3, Ex. JEL-6 at 1.

⁷⁸⁸ Advisors' Post-Hearing Brief at 102, *citing* Losonsky-1, Ex. GL-2 at 2.

noteworthy that these calculations were performed using the most conservative assumption that the RICE Alternative would operate 24 hours per day, 365 days per year;⁷⁸⁹ and

WHEREAS, the Advisors are not persuaded by the testimony of Joint Intervenors' witness Dr. Kolker, finding that he did not provide any analysis containing his own calculations or site-specific information to support his positions, but that he merely relied upon the research of others, which did not include any specific analysis or drawdown calculations.⁷⁹⁰ The Advisors note that Dr. Kolker acknowledged that prior to this case, he had never attempted to assess possible subsidence resulting from groundwater withdrawal from a specifically proposed industrial facility;⁷⁹¹ and

WHEREAS, the Advisors find it persuasive that ENO has presented evidence that the flood protection measures, including the HSDRRS, that have been installed eliminate estimated flooding at the Michoud location even under the worst case scenario considered under the CPRA's 2017 Master Plan;⁷⁹² and

WHEREAS, the Advisors are also persuaded by ENO's evidence that, in addition to the flood protection measures being taken by the SLFPA-E, ENO has determined the appropriate Top of Concrete level to be 3.5 feet above sea level, which is 2.5 feet higher than the FEMA Advisory recommendation and one foot higher than the observed Hurricane Katrina flooding;⁷⁹³ and

WHEREAS, the Advisors observe that while Dr. Wright argues that ENO's proposal will have a racially discriminatory effect because ENO established a deeply flawed planning process without public input, evaluated sites in disregard to population growth and applied for

⁷⁸⁹ Advisors' Post-Hearing Brief at 105.

⁷⁹⁰ Advisors' Post-Hearing Brief at 105.

⁷⁹¹ Advisors' Post-Hearing Brief at 106, *citing* Hr'g Tr. 12/201/7, 140:3-8.

⁷⁹² Advisors' Post-Hearing Brief at 106-107, *citing* Losonsky-1 at 25:4-9.

⁷⁹³ Advisors' Post-Hearing Brief at 107, *citing* Losonsky-1 at 24:4-9.

and/or obtained environmental permits that do not require public notice, Dr. Wright has no background, education, or experience in energy resource planning or power plant siting or permitting.⁷⁹⁴ The Advisors note that she does not appear to have any relevant experience in utility resource planning, utility transmission or generation planning or operations, or electrical engineering that would assist her in evaluating and understanding the decision to put a power plant in a specific location.⁷⁹⁵ The Advisors conclude that Dr. Wright and the other Joint Intervenors' witnesses have simply failed to provide sufficient evidence to demonstrate that the siting of a natural gas-fired power plant at the Michoud site will perpetuate environmental racism;⁷⁹⁶ and

WHEREAS, the Advisors argue that ENO has presented as a witness Bliss Higgins, an experienced former Assistant Secretary of the LDEQ's Office of Environmental Services and recognized air quality expert, who over the course of her work at LDEQ and later as an environmental consultant, has studied the EPA's guidelines on environmental justice, and conducted evaluations to assess whether particular projects would result in a disproportionate adverse impact on minority or low-income populations. The Advisors note that Ms. Higgins testified that, based on the specific facts and circumstances of the proposed NOPS alternatives, the applicable science, and well-established environmental standards, it is her opinion that the operation of NOPS will not result in any environmental injustice for the following reasons: (1) Orleans Parish is currently in attainment of NAAQS; (2) the project will be cited more than one mile from the nearest residential area; and (3) the objective data support the conclusion that there will be no significant adverse health impacts from NOPS;⁷⁹⁷ and

⁷⁹⁴ Advisors' Post-Hearing Brief at 108, *citing* Wright-1 at 21:4-22:19 and Ex. 1.

⁷⁹⁵ Advisors' Post-Hearing Brief at 109, *citing* Wright-1, Ex. 1.

⁷⁹⁶ Advisors' Post-Hearing Brief at 109.

⁷⁹⁷ Advisors' Post-Hearing Brief at 109-110, *citing* Higgins-1 at 6:4-9:3; *see also*, ENO-2 at 8:6-9:9, 17:5-10.

WHEREAS, the Advisors recommend that the Council rely upon the determinations of the EPA and LDEQ as to whether there will be an adverse health impact, and that if they determine no adverse health impact, then there would not be a racially disproportionate significant adverse health impact.⁷⁹⁸ The Advisors note that ENO witness Mr. Rice committed that the air emissions from NOPS will not exceed regulatory standards that have been put in place to safeguard human health and the environment and will be less than the retired Michoud units;⁷⁹⁹ and

WHEREAS, the Advisors conclude that the Joint Intervenors have failed (1) to offer any evidence that effectively counters ENO's evidence that the proposed plant will meet all applicable regulatory requirements regarding emissions, and (2) to demonstrate that there will be any significant adverse health impacts from siting the plant at Michoud.⁸⁰⁰ The Advisors also argue that Louisiana case law regarding environmental justice does not support a finding that environmental discrimination would be perpetuated by the siting of a natural gas plant at Michoud.⁸⁰¹ The Advisors argue that the case of *North Baton Rouge Environmental Association v. Louisiana Department of Environmental Quality* is particularly instructive. In that case, the court found that in a situation where a plant was being built at the same site where a plant previously stood, where that previous plant had polluted more, and was in an industrial area where there was no indication that the original zoning was intentionally racist, the granting of a permit did not constitute environmental racism solely due to the proximity of an African American neighborhood;⁸⁰² and

⁷⁹⁸ Advisors' Post-Hearing Brief at 111.

⁷⁹⁹ Advisors' Post-Hearing Brief at 111, *citing* Rice-4 at 21:10-15.

⁸⁰⁰ Advisors' Post-Hearing Brief at 111.

⁸⁰¹ Advisors' Post-Hearing Brief at 111.

⁸⁰² Advisors' Post-Hearing Brief at 111-114, *citing* *N. Baton Rouge Env'tl. Ass'n v. La. Dep't of Env'tl. Quality*, 805 So. 2d 255, 263 (La. App. 1st Cir. 2001).

WHEREAS, the Advisors believe that this case compares favorably to *North Baton Rouge*, in that Orleans Parish is already in attainment with all NAAQS whereas the area at issue in that case was not, the Michoud site is a sparsely populated industrial site where a power plant has been operating for decades, and, based on expert testimony, the proposed RICE unit will represent a significant reduction in allowable emissions compared to the allowable emissions from the deactivated Michoud units.⁸⁰³ Moreover, the Advisors note, the appellants in the *North Baton Rouge* case argued that the initial siting of the facility was racially discriminatory, whereas in this case, even Dr. Wright admits in her testimony that when the original Michoud plant was undertaken, New Orleans East was largely undeveloped wetlands and sparsely populated;⁸⁰⁴ and

WHEREAS, the Advisors note that ENO has submitted expert testimony indicating that the emissions from the RICE units would be dissipated before they reach the fence line to concentrations well below the limits for public breathing level air based on federal air quality standards, and the emissions represent an average 77.3% reduction in criteria pollutants pursuant to the EPA's air quality standards compared to the two old Michoud units retired in 2016;⁸⁰⁵ and

WHEREAS, the Advisors believe that the remainder of Dr. Wright's claims also fall apart under further examination.⁸⁰⁶ The Advisors do not find Dr. Wright's claims that the 2015 IRP Process was highly flawed, because there was no mention of the siting of the proposed CT discussed in that proceeding to be persuasive because it seems to be based on a misunderstanding of what an IRP process is and does.⁸⁰⁷ The Advisors note that an IRP proceeding simply does not consider the location of any specific resource that may be acquired in the future;⁸⁰⁸ and

⁸⁰³ Advisors' Post-Hearing Brief at 114; *see also*, ENO-2 at 15:6-8.

⁸⁰⁴ Advisors' Post-Hearing Brief at 114, *citing* Wright 1 at 13:7-14:8.

⁸⁰⁵ Advisors' Post-Hearing Brief at 114, *citing* Higgins-1 at 50:1-7, 11-15.

⁸⁰⁶ Advisors' Post-Hearing Brief at 114.

⁸⁰⁷ Advisors' Post-Hearing Brief at 115.

⁸⁰⁸ Advisors' Post-Hearing Brief at 115-116.

WHEREAS, the Advisors also argue that the Company's 2015 IRP process and its specific proposal to construct NOPS have provided multiple opportunities for meaningful public participation, with at least 21 public meetings regarding NOPS, the opportunities provided by Council Resolution Nos. R-16-506 and R-17-426 for interested parties and the public at large to be heard regarding the NOPS proposal including public outreach meetings in each Council district and a public hearing in the Council chambers.⁸⁰⁹ The Advisors argue that any member of the public who took the time to follow the Council's energy-related proceedings would have been aware that although the type of technology and specific location were not determined until ENO filed its application in this docket, the potential siting of a power plant in New Orleans has been under discussion before the Council since at least 2015, beginning with the proposed settlement regarding the termination of the Entergy System Agreement, and continuing through the 2015 IRP process and into the instant docket, with ample notice and opportunity for public input in each docket;⁸¹⁰ and

WHEREAS, the Advisors find the testimony of Ms. Higgins regarding the proximity of residential neighborhoods to the Michoud site to be more persuasive than the testimony of Dr. Wright, due to Ms. Higgins' use of the tool preferred by the EPA;⁸¹¹ and

WHEREAS, the Advisors also find no merit in Dr. Wright's argument that ENO's process perpetuated environmental racism because it applied for and/or obtained environmental permits that do not require public notice, public comments, or public hearing.⁸¹² The Advisors argue that to the extent ENO applied for environmental permits in a manner that meets the

⁸⁰⁹ Advisors' Post-Hearing Brief at 116.

⁸¹⁰ Advisors' Post-Hearing Brief at 117-121.

⁸¹¹ Advisors' Post-Hearing Brief at 122-124.

⁸¹² Advisors' Post-Hearing Brief at 124.

requirements of the EPA and LDEQ, the Advisors see no reason for the Council to conclude that applying for such permits reflects discriminatory intent on the part of ENO;⁸¹³ and

WHEREAS, the Advisors argue that to the extent that Dr. Wright does not feel that the EPA and LDEQ processes permit sufficient public input, she should raise that matter before the EPA and LDEQ;⁸¹⁴ and

WHEREAS, the Advisors conclude that siting a power plant at Michoud under the circumstances described by ENO in its Initial Application, Supplemental Application, and testimony is reasonable and in the public interest, particularly in light of ENO's commitment to comply with all applicable local, state, and federal laws and regulations.⁸¹⁵ The Advisors recommend that the Council require ENO to submit proof of such compliance in the form of submitting to the Council copies of all permits and authorizations received by the Company;⁸¹⁶ and

WHEREAS, ENO argues that no party has presented evidence of any risks associated with the specific groundwater usage required to operate NOPS, and no party has presented any scientifically-based challenges to the calculations Dr. Losonsky performed to prove that NOPS will not increase subsidence and that NOPS poses no risk to area infrastructure, including the flood protection measures that Dr. Losonsky helped to design and implement as a Commissioner of the SLFPA-E;⁸¹⁷ and

WHEREAS, ENO argues that Joint Intervenor's witness Dr. Kolker has a Ph.D. in "Marine and Atmospheric Science" but does not have any degrees in geology or hydrogeology, and several of his admissions and omissions demonstrate that he has no basis for disputing the

⁸¹³ Advisors' Post-Hearing Brief at 124.

⁸¹⁴ Advisors' Post-Hearing Brief at 124-125.

⁸¹⁵ Advisors' Post-Hearing Brief at 125.

⁸¹⁶ Advisors' Post-Hearing Brief at 125.

⁸¹⁷ ENO Post-Hearing Brief at 116-117.

accuracy of Dr. Losonsky's calculations and the resulting conclusions.⁸¹⁸ ENO argues that Dr. Kolker admitted that, prior to this proceeding, he has never before attempted to assess potential impacts of groundwater withdrawal or to assess possible subsidence risks, related to an industrial facility.⁸¹⁹ ENO argues that Dr. Kolker admitted that, unlike Dr. Losonsky, he did not perform any drawdown or consolidation calculations and made no attempt to replicate Dr. Losonsky's calculations or verify the accuracy of his results;⁸²⁰ and

WHEREAS, ENO argues that Dr. Kolker's criticism that Dr. Losonsky's calculations only covered a 10-year period is demonstrably false because Dr. Losonsky's calculations covered a 50-year period.⁸²¹ ENO also argues that Dr. Kolker's criticism that that Dr. Losonsky failed to explain what happens to void space left by pumping demonstrates his fundamental lack of understanding of aquifer hydraulics and drawdown and consolidation calculations, because Dr. Losonsky's calculations demonstrated that no void space would be created.⁸²² ENO states that beyond his limited and erroneous attempts to cast doubt on Dr. Losonsky's analysis, Dr. Kolker's discussion of subsidence is focused on his recommendation that the Council obtain another opinion on subsidence beyond that provided by Dr. Losonsky, despite the fact that Dr. Losonsky's analysis provided the level of detail that Dr. Kolker recommends.⁸²³ ENO argues that neither Dr. Kolker nor any other Joint Intervenors' witness has provided any evidence or analysis specific to NOPS that in any way substantiates the claims that NOPS poses a subsidence-related risk to New Orleans, while Dr. Losonsky's undisputed, scientifically-valid

⁸¹⁸ ENO Post-Hearing Brief at 105, *citing* Kolker-1, Ex. AK-1, and Kolker-2 at 1.

⁸¹⁹ ENO Post-Hearing Brief at 105, *citing* Hr'g Tr. 12/20/17, 139-140.

⁸²⁰ ENO Post-Hearing Brief at 105, *citing* Hr'g Tr. 12/20/17, 144-146, 153.

⁸²¹ ENO Post-Hearing Brief at 106, *citing* Kolker-2 at 5, Losonsky-2 at 7-11.

⁸²² ENO Post-Hearing Brief at 106, *citing* Kolker-2 at 4, Losonsky-1, Ex. GL-2 at 3, Losonsky-2 at 11.

⁸²³ ENO Post-Hearing Brief at 107, *citing* Kolker-1 at 10.

calculations affirmatively demonstrate that no such risk exists, even in a worst-case scenario;⁸²⁴ and

WHEREAS, ENO observes that with respect to flooding at the Michoud site, Dr. Kolker refers to the outdated 2012 CPRA Master Plan's assessment of flood risks at the Michoud site, which did not take into account the HSDRRS measures and other improvements, and that Dr. Kolker ignores the 2017 CPRA Master Plan's assessment that there is no flood risk under the same scenario.⁸²⁵ ENO argues that Dr. Kolker admitted that the post-Katrina flood protection systems are substantially better than the pre-Katrina ones;⁸²⁶ and

WHEREAS, ENO also argues that Dr. Kolker's assessment of the flood risks at the Michoud site overlooked ENO's plan to raise the elevation of the proposed location of the NOPS units by 5.5 feet and that Dr. Kolker's predictions did not appear to be granular enough to provide site-specific risk evaluations for the NOPS site.⁸²⁷ ENO argues that Dr. Kolker further admitted that his assessment of flood risks assumed current conditions at the time of the study and did not take into account the proposed elevation changes and that Dr. Kolker admitted he has never previously attempted to assess possible flood risks associated with a proposed industrial facility;⁸²⁸ and

WHEREAS, ENO argues that the Joint Intervenors' assertions regarding air emissions are contradicted by the evidence.⁸²⁹ ENO argues that without any specific evidence with regard to NOPS, the Joint Intervenors have attempted to sow fear in the community despite the fact that their allegations lack any factual or evidentiary support.⁸³⁰ ENO argues that the only testimony

⁸²⁴ ENO Post-Hearing Brief at 107-108.

⁸²⁵ ENO Post-Hearing Brief at 109-110, *citing* Kolker-1 at 7-9.

⁸²⁶ ENO Post-Hearing Brief at 110, *citing* Hr'g Tr. 12/20/17, 162-163.

⁸²⁷ ENO Post-Hearing Brief at 113-114, *citing* Hr'g Tr. 12/20/17, 164-165.

⁸²⁸ ENO Post-Hearing Brief at 113-114, *citing* Hr'g Tr. 12/20/17, 141, 164-165.

⁸²⁹ ENO Post-Hearing Brief at 124-125.

⁸³⁰ ENO Post-Hearing Brief at 125.

they have submitted on the issue of air emissions addresses only PM_{2.5} emissions, and only in a general sense, without any attempt to specifically address NOPS.⁸³¹ ENO argues that Joint Intervenors have not submitted any testimony that attempts to refute the C-K Technical Report or the air emissions conclusions contained therein, neither have they attempted to conduct their own analysis or air dispersion modeling.⁸³² ENO also notes that Joint Intervenors have not taken exception to ENO's conclusion that NOPS will be considered a minor modification under the PSD program, rather at trial, counsel for the Alliance appeared to try to get ENO's expert, Ms. Higgins, to concede that the statutory framework established for the PSD program is based on a "regulatory fiction" in that it allows the decrease in currently-permitted emissions from the Michoud plant to be netted against the NOPS emissions for the purpose of determining potential effects on air quality from the new facility.⁸³³ ENO also argues that counsel for the Alliance proceeded to suggest that the Council simply ignore the legal and regulatory framework established by Congress, the EPA, the Louisiana legislature and the LDEQ and draw its own conclusions regarding air emissions;⁸³⁴ and

WHEREAS, ENO argues that the Joint Intervenors would have the Council usurp the role of the LDEQ, disregard the legal and regulatory framework on air emissions, and ignore the federally imposed air emissions standards that have been developed through a public process over the course of several years and with extensive input from the public and scientific community and instead impose its own air emissions standards and regulations without undergoing any process;⁸³⁵ and

⁸³¹ ENO Post-Hearing Brief at 125-126.

⁸³² ENO Post-Hearing Brief at 126.

⁸³³ ENO Post-Hearing Brief at 126.

⁸³⁴ ENO Post-Hearing Brief at 127.

⁸³⁵ ENO Post-Hearing Brief at 127.

WHEREAS, ENO argues that the Joint Intervenors would have the Council tell the only Fortune 500 Company headquartered in the City that it cannot invest over \$200 million in the community to build a modern, efficient peaking generation power plant that ENO's transmission engineers have sworn under oath is needed to prevent cascading outages in the City in the near future, and that such denial could be based on the simple fact that the plant will have emissions associated with burning natural gas to create electricity, even though the air emissions will be significantly lower than the previous plant and are by law considered *de minimis*.⁸³⁶ ENO argues that this would be bad public policy and send an extremely poor signal to other businesses that might be considering investing in New Orleans by locating operations in the City,⁸³⁷ and

WHEREAS, ENO disagrees with Dr. Wright's criticism of ENO for applying to LDEQ for a minor modification of the existing Michoud air permit that does not require public comment or an Environmental Assessment Statement and states that the Company's application was entirely proper and that the LDEQ set public hearings in New Orleans East when the application was initially filed, which were cancelled due to various circumstances, but that the LDEQ had invited and received public comments and has indicated that it intends to schedule a new public hearing on any draft permits that would authorize the construction and operation of NOPS;⁸³⁸ and

WHEREAS, ENO also argues that siting NOPS at Michoud does not raise any environmental justice concerns.⁸³⁹ ENO argues that environmental justice is generally a consideration of whether minority and low-income populations are being disproportionately

⁸³⁶ ENO Post-Hearing Brief at 127-128.

⁸³⁷ ENO Post-Hearing Brief at 128.

⁸³⁸ ENO Post-Hearing Brief at 130-131, *citing* Hr'g Tr. 12/191/7, 77-78. *See also*, ENO-2 at 18.

⁸³⁹ ENO Post-Hearing Brief at 131.

exposed to adverse environmental effects⁸⁴⁰ and that the EPA defines “fair treatment” as meaning that “no group of people should bear a disproportionate share of the negative environmental consequences resulting from industrial, governmental, and commercial operations or policies.”⁸⁴¹ ENO states that the EPA has provided the following indicators of “meaningful involvement:” (1) “[p]eople have an opportunity to participate in decisions about activities that may affect their environment and/or health;” (2) “[t]he public’s contribution can influence the regulatory agency’s decision;” (3) “[c]ommunity concerns will be considered in the decision making process;” and (4) “[d]ecision makers will seek out and facilitate the involvement of those potentially affected;”⁸⁴² and

WHEREAS, ENO argues that with respect to Dr. Wright’s criticism that “nearby residential neighborhoods” will be impacted, that Dr. Wright testified that there was a distance of 0.75 miles between NOPS and nearby residential neighborhoods, however, Ms. Higgins used the EPA tool EJSCREEN to refute Dr. Wright’s claim and show that “census data indicate that no people live within a one mile radius of the center of the site.”⁸⁴³ ENO also argues that its witness Mr. Jonathan Long testified that it was “unusual” not to have residential neighborhoods at the fence line of a power facility, which makes the Michoud site and its one-mile buffer all the more attractive.⁸⁴⁴ ENO argues that the Michoud site is located in a sparsely populated census tract that does not have the “close geographic proximity to residential neighborhoods” that Dr. Wright suggests in her testimony; and

⁸⁴⁰ ENO Post-Hearing Brief at 131; *see also*, ENO-2 at 8.

⁸⁴¹ ENO Post-Hearing Brief at 131-132; *see also*, ENO-2 at 8.

⁸⁴² ENO Post-Hearing Brief at 131-132. *See also*, ENO-2 at 8, *quoting* Learn About Environmental Justice, United States Environmental Protection Agency, <https://www.epa.gov/environmentaljustice/learn-about-environmental-justice>.

⁸⁴³ ENO Post-Hearing Brief at 132, *citing* Wright-1 at 12, 14; *see also*, ENO-2 at 11, Ex. BMH-1.

⁸⁴⁴ ENO Post-Hearing Brief at 132-133, *citing* Hr’g Tr. 12/18/17, 127; *see also*, ENO-2 at 11.

WHEREAS, ENO argues that NOPS is not anticipated to have any adverse effects in the area of air quality, public health, and groundwater withdrawal, and accordingly, it will not bring negative disproportionate effects to any group of citizens in New Orleans East, but to the contrary will bring jobs and hundreds of millions of dollars in economic benefits to the City;⁸⁴⁵ and

WHEREAS, with respect to meaningful involvement, ENO argues that ENO and the Council held numerous public meetings throughout the 2015 IRP process and this docket, many in New Orleans East.⁸⁴⁶ ENO argues that the Council has offered multiple opportunities for public input and has provided interested parties and the public at large substantial notice and opportunity to be heard concerning the NOPS proposal, including public outreach meetings in each Council district and a public hearing in Council Chambers;⁸⁴⁷ and

WHEREAS, the Council finds that ENO has successfully demonstrated a reliability need for generation capacity in the eastern part of New Orleans and that installing capacity in the west will not sufficiently mitigate the need; and

WHEREAS, the Council finds that there are many proven advantages to the Michoud site, including ENO's ownership of the site, the availability of the gas pipeline, and transmission and distribution interconnections and administrative building facilities, ENO's long history of operating a plant at that site and resulting in-depth knowledge of the site, and that adding generation at the Michoud site will beneficially support ENO's transmission reliability; and

WHEREAS, the Council finds that Dr. Lonsonsky's testimony regarding the impact of groundwater usage by NOPS at the site is more persuasive than Dr. Kolker's due to Dr. Losonsky's detailed and site-specific calculations; and

⁸⁴⁵ ENO Post-Hearing Brief at 131.

⁸⁴⁶ ENO Post-Hearing Brief at 133.

⁸⁴⁷ ENO Post-Hearing Brief at 133-134.

WHEREAS, the Council finds that the evidence indicates that significant mitigation of the potential for flooding at the Michoud site has occurred, in particular the HSDRRS and the raising of the Top of Concrete level above both the FEMA guidance and the level of flooding seen during Katrina, and the Council finds the CPRA 2017 Master Plan prediction of no flooding at the site under the worst-case scenario to be persuasive; and

WHEREAS, the Council is not inclined to disregard the expertise of the EPA and LDEQ with regard to air emission, as the Joint Intervenors request. The Council recognizes that those agencies have considerable expertise regarding and regulatory authority over air emissions. The Council also does not believe it has a sufficient record before it in this case to create a new regulatory standard regarding air emissions and to determine to which entities in New Orleans such a standard should be applied. The Council, therefore, finds that it will be sufficient to condition its approval of the plant upon ENO demonstrating compliance with all EPA and LDEQ regulations and requirements; and

WHEREAS, in light of the requirement the Council will impose to meet all EPA and LDEQ regulations and requirements, the Council finds that there is no potential for a disproportionate adverse impact on minority neighborhoods in New Orleans East. The Council also makes note of the substantial economic benefits that the project will bring to New Orleans, from which the New Orleans East residents will benefit; and

WHEREAS, the Council has already determined above that there has been sufficient opportunity for public input into its consideration of the NOPS application; and

WHEREAS, the Council agrees that the *North Baton Rouge* case supports a finding that there is no perpetuation of racial injustice where a new plant is sited on the location of a prior plant that had higher emissions than the new plant; and

WHEREAS, the Council finds that siting the NOPS plant at Michoud is reasonable; and

IV. Whether ENO's proposed costs, cost recovery mechanism and Monitoring Plan are just and reasonable and should be approved by the Council

WHEREAS, ENO has requested approval of a contemporaneous exact cost recovery rider, to begin on the date that NOPS begins commercial operation ("COD"), to recover non-fuel and capacity costs. The rider they propose would be similar to the PPCACR Rider that has been used to recover costs associated with the UPS acquisition and the Ninemile 6 PPA. The PPCACR Rider would be an interim measure until the next full rate case or an annual Formula Rate Plan ("FRP") review; and

WHEREAS, ENO has also requested that major maintenance costs associated with the project be recovered through a fuel surcharge; and

WHEREAS, ENO assumes that the 2018 Combined Rate Case will be completed before the NOPS COD, and therefore the project costs would not normally be reflected in base rates at that time; and

WHEREAS, ENO asserts that an exact cost recovery rider applicable to all customers is needed, beginning on the NOPS COD, including a return on equity ("ROE") to be determined in the Combined Rate Case and based on ENO's actual capital structure at the COD, and would provide the greatest flexibility in meeting the objectives of providing ENO a reasonable opportunity to recover its investment and resolves any timing issues that may result in regulatory lag, while avoiding the burden and inefficiency of pancaked rate cases.⁸⁴⁸ ENO notes that this is the first investment of this kind that it has made in over 40 years, and says it must have a reasonable opportunity to recover its full investment, including its authorized return;⁸⁴⁹ and

⁸⁴⁸ ENO Post-Hearing Brief at 145-147.

⁸⁴⁹ ENO Post-Hearing Brief at 145.

WHEREAS, ENO assumes that an FRP will be approved to commence in 2020 subsequent to the Combined Rate Case. ENO anticipates that its initial year ROE evaluation would exclude the project costs and revenue recovered in its proposed rider. ENO proposes that the rider would apply until realignment in the 2021 FRP; and

WHEREAS, ENO asserts that if it is not allowed to begin recovering project costs as of the COD, there would be significant adverse effects on ENO's financial condition.⁸⁵⁰ ENO argues that for it to undertake the construction of the first new generation in the City in over forty years, the Company must have assurances of a reasonable opportunity for the timely recovery of its investment and its allowed return on investment.⁸⁵¹ If there is no timely recovery, ENO will not begin to recover operation and maintenance ("O&M") expenses, which it will begin to incur as of the NOPS COD, nor will it begin to recover any depreciation or ROE, until the next rate change in the FRP, or until the next rate case, if there is no FRP;⁸⁵² and

WHEREAS, the Advisors and all Intervenors urge the Council to reject ENO's proposed exact cost recovery rider as inconsistent with principles of cost causation, constituting single-issue ratemaking,⁸⁵³ and unnecessary.⁸⁵⁴ NOCS and Air Products strongly object to ENO's proposed exact cost recovery rider because this mechanism has caused fixed costs to be borne disproportionately by large commercial and industrial customers in the past, and would similarly burden them unduly, particularly if NOPS costs are allocated on the kWh basis proposed by ENO;⁸⁵⁵ and

⁸⁵⁰ Rice-4 at 22:22-23:4; Supplemental and Amending Direct Testimony and Exhibits of Orlando Todd, Docket No. UD-16-02, at 7:15-8:2 (July 6, 2017) ("Todd-3").

⁸⁵¹ Rice-4 at 23:4-8.

⁸⁵² Todd-3 at 7:18-8:2.

⁸⁵³ Advisors' Post-Hearing Brief at 129; NOCS Post-Hearing Brief at 26-28, Air Products Post-Hearing at 3-4, 16-18; Joint Intervenors' Post-Hearing Brief at 104.

⁸⁵⁴ NOCS Post-Hearing Brief at 26-28, 33-34, Joint Intervenors' Post-Hearing Brief at 104, Advisors' Post-Hearing Brief at 129.

⁸⁵⁵ NOCS Post-Hearing Brief at 35; Air Products Post-Hearing Brief at 4.

WHEREAS, Intervenor Air Products argues that ENO’s proposed exact cost recovery rider is arbitrary because it is “outside mainstream of cost recovery practice.”⁸⁵⁶ The proposed mechanism, like the PPCACR Rider, would allocate the non-fuel revenue requirement to customers on the basis of kWhs purchased. It is not “cost-based” and is “not an appropriate means of collecting non-fuel revenue requirement;”⁸⁵⁷ and

WHEREAS, Air Products explains that the PPCACR Rider was created as a temporary recovery mechanism of the non-fuel revenue requirement, on a kWh basis, associated with the Ninemile 6 PPA. It was intended to remain in place only until the rate case that was contemplated in the Ninemile 6 proceeding brought the costs into rate base. However, as part of the Algiers transaction, the rate case was deferred until 2018. Subsequently, the Council approved continued use of the PPCACR Rider in connection with costs of the UPS acquisition. Again, Air Products argues, the costs are allocated equally among customer classes on a kWh basis rather than on a cost-based basis;⁸⁵⁸ and

WHEREAS, Air Products points out that under the existing PPCACR Rider, it is paying approximately \$1.5 million too much each year from Ninemile 6 and UPS.⁸⁵⁹ If a PPCACR Rider were used to allocate the non-fuel revenue requirement for NOPS, Air Products would be allocated approximately \$1.06 million instead of the \$400,000 it would be allocated if the 1.2% base rate allocation factor were used instead.⁸⁶⁰ Air Products asks the Council to realign the existing cost recovery rider across customer classes as an equal percent of base rate revenues

⁸⁵⁶ Direct Testimony and Exhibits of Maurice Brubaker, Docket No. UD-16-02, at 4:5-7 (Jan. 6, 2017) (“Brubaker-1”); Brubaker-2 at 4:8-11, 11:19-22.

⁸⁵⁷ Brubaker-1 at 4:7.

⁸⁵⁸ Brubaker-2 at 11:10-18.

⁸⁵⁹ Brubaker-2 at 4:8-15; 13:11-17.

⁸⁶⁰ Brubaker-2 at 14:4-8.

within 60 days of its resolution in this proceeding, or otherwise direct ENO in the Combined Rate Case to compensate Air Products for overcharges;⁸⁶¹ and

WHEREAS, the Advisors state that a utility's revenue requirement should be based on the utility's overall costs, and all cost recovery rate mechanisms should derive from that basis. Designing rates from a separate or singular cost analysis may not include the overall impacts considered in a utility's total revenue requirement by not reflecting offsetting changes from other areas of the utility's operations. While in any given year a utility may over- or under-recover its revenue requirement for a number of reasons,⁸⁶² prolonged implementation of the type of rider ENO proposes exacerbates the risk that costs and cost recovery are not properly allocated to those responsible for or benefiting from the cost; and

WHEREAS, all Intervenors agree that the fixed costs of NOPS should be evaluated together with all of ENO's costs, and recovered on a going-forward basis through ENO's base rates, as set in the Combined Rate Case;⁸⁶³ and

WHEREAS, ENO and the Advisors are in agreement that ENO should have a full and fair opportunity to recover prudently incurred costs that are approved by the Council; but reasonable opportunity to recover investment and a fair return is not a guarantee of dollar-for-dollar cost recovery;⁸⁶⁴ and

WHEREAS, the Advisors explain that the Combined Rate Case is expected to conclude by mid-year 2019, and NOPS cost recovery can be accommodated through rates based on proformed costs in the Combined Rate Case test period. The targeted COD would be relatively

⁸⁶¹ Air Products Post-Hearing Brief at 11.

⁸⁶² Hr'g Tr. 12/20/17, 60:16-20.

⁸⁶³ NOCS Post-Hearing Brief at 26-28, Joint Intervenors' Post-Hearing Brief at 104, Air Products Post-Hearing Brief at 3-4.

⁸⁶⁴ Hr'g Tr. 12/20/17, 60:6-15.

close to the effective date of revised rates from the Combined Rate Case and the subsequent annual revenue adjustments;⁸⁶⁵ and

WHEREAS, the Advisors support recovery of project fixed costs through the two-step rate case mechanism proposed by Advisors' witness Victor Prep:

If an FRP is approved by the Council, the first step would occur with new rates anticipated to be effective by August 1, 2019. The second step would occur with the COD of the NOPS project, which is anticipated to be no sooner than 2020. Depending on the structure of an approved FRP, the FRP would be filed by May 31, 2020, and an adjustment to base rate revenue (including the two step increase, depending on the timing of a COD in 2020) could occur in October 2020. The first FRP adjustment would be based on a 2019 test year and customer class allocations from the Combined Rate Case including pro-forma costs of the NOPS project.

If an FRP is not approved, the second step increase would still occur with the COD of the NOPS project. The stand-alone full decoupling adjustment would be filed annually by May 31, 2020, maintaining the total utility fixed cost revenue requirement approved in the Combined Rate Case with the limited exception that the revenue requirement be reset with a substantial change to the fixed cost of service, such as the addition of new generating capacity (NOPS).

In either of the FRP and stand-alone decoupling cases, the two step rate increase would apply with the project COD, and there would be three years of revenue adjustments based on the project fixed costs updated in each test period.⁸⁶⁶

Thus, the Advisors do not agree that exact cost recovery is required; and

WHEREAS, ENO agrees that Mr. Prep's proposed two-step recovery method could be reasonable, as long as ENO is assured that the recovery of the NOPS revenue requirement will commence with the COD;⁸⁶⁷ and

⁸⁶⁵ Advisors' Post-Hearing Brief at 130.

⁸⁶⁶ Prep-1 at 22:7-23:5.

⁸⁶⁷ ENO Post-Hearing Brief at 151-152. *See also*, Hr'g Tr. 12/19/17, 130:16-23; Hr'g Tr. 12/19/17, 130:24-131:1, 132:1-4; Hr'g Tr. 12/20/17, 50:2-20.

WHEREAS, ENO's witnesses also agree that the kilowatt basis used by the current PPCACR Rider is not appropriate for NOPS investment recovery.⁸⁶⁸ In allocating project non-fuel/fixed costs to customer classes, a demand cost allocation methodology is much more appropriate than a kWh-based allocation.⁸⁶⁹ If Advisors' witness Prep's cost recovery mechanism is used, non-fuel O&M costs and investment would not be based on a per-kWh basis;⁸⁷⁰ and

WHEREAS, Air Products supports the two-step rate increase proposed by the Advisors' witnesses that would be developed in conjunction with the 2018 Combined Rate Case.⁸⁷¹ Further, Air Products says that if a rider is approved, non-fuel costs should be allocated on a contribution to base revenues basis and not on a kWh basis.⁸⁷² Air Products also suggests that the non-fuel cost could be capitalized and deferred for consideration in a subsequent rate case or annual review as part of an FRP;⁸⁷³ and

WHEREAS, ENO asserts that if its proposed rider is implemented in the context of an FRP, it would not violate principles of single-issue ratemaking. To the extent that the Council disagrees with its view, ENO asserts that the circumstances warrant an exception to the general prohibition on single-issue ratemaking;⁸⁷⁴ and

WHEREAS, NOCS contends that if an FRP is established in the Combined Rate Case, the fixed, non-fuel costs of NOPS should be collected inside (and subject to) the earnings bandwidth;⁸⁷⁵ and

⁸⁶⁸ Hr'g Tr. 12/19/17, 131:18-25. Hr'g Tr. 12/20/17, 49:5-50:8; 57:17-58:6.

⁸⁶⁹ Hr'g Tr. 12/19/17, 134:18-135:7. Hr'g Tr. 12/20/17, 49:5-50:8; 57:17-58:6.

⁸⁷⁰ Hr'g Tr. 12/19/17, 134:12-16.

⁸⁷¹ Air Products Post-Hearing Brief at 3-4.

⁸⁷² Air Products Post-Hearing Brief at 3-4.

⁸⁷³ Brubaker-2 at 4:16-21; 14:12-17.

⁸⁷⁴ ENO Post-Hearing Brief 148-149.

⁸⁷⁵ NOCS Post-Hearing Brief at 35-36.

WHEREAS, Advisors’ witness Prep argues further that if the Council does not establish an FRP in the Combined Rate Case, an evaluation of NOPS cost recovery and related revenue adjustment can occur with a decoupling mechanism consistent with the Council’s guidance in Resolution No. R-16-103;⁸⁷⁶ and

WHEREAS, the Council agrees that a utility’s revenue requirement should be based on the utility’s overall costs, and all cost recovery rate mechanisms should derive from that basis. Departure from this general ratemaking principle should occur only under limited circumstances where it has been conclusively shown that failure to allow contemporaneous exact cost recovery would have a severe adverse impact on the utility; and

WHEREAS, ENO has not demonstrated that its financial stability and credit ratings would be adversely affected if the opportunity for cost recovery were provided by means other than a contemporaneous exact cost recovery rider. ENO has only provided general statements, without any credible analysis, that “prolonged regulatory lag on recovery of a substantial investment like NOPS could severely limit the Company’s ability to make other required investments and respond to emergency conditions;”⁸⁷⁷ and

WHEREAS, based on the evidence in the record, and given that even ENO’s own witnesses have conceded that the PPCACR Rider mechanism, as proposed, is not an appropriate cost recovery mechanism for NOPS, the Council does not believe that recovery of project fixed costs should occur through a rider as proposed by ENO. Instead, base rate revenues should be used to develop a current estimate of the project fixed costs allocated to customer classes, with the final allocation methodology to be determined in the Combined Rate Case. In the event that the COD is later than the test periods and effective dates of the Combined Rate Case rates, the

⁸⁷⁶ Resolution No. R-16-103 (Apr. 7, 2016).

⁸⁷⁷ Rice-4 at 22:19-23:8.

recovery of project fixed costs should be accomplished using the two-step increase or adjustment to base rates that Advisors' witness Mr. Prep has set forth; and

WHEREAS, the Council finds that the request by Air Products for the Council to realign ENO's revenue recovery under the current PPCACR Rider within 60 days of issuing an order on ENO's NOPS proposal is beyond the scope of this proceeding. The PPCACR Rider associated with the Ninemile 6 PPA and UPS acquisition were addressed in Docket Nos. UD-11-03 and UD-15-01. Air Products did not intervene in those proceedings and the Council is not persuaded that they should be reopened as part of its decision on ENO's NOPS proposal in this proceeding. The current PPCACR Rider will be evaluated in the Combined Rate Case, along with all of ENO's costs, including project fixed costs of NOPS; and

LTSA cost recovery

WHEREAS, ENO is contemplating entering a long term service agreement ("LTSA") with the original equipment manufacturer for major maintenance for either NOPS alternative. ENO says it has a term sheet with the original equipment manufacturer for the CT⁸⁷⁸ and is exploring whether an LTSA is possible for the RICE Alternative.⁸⁷⁹ The LTSA for the CT would include planned and unplanned maintenance (subject to cost ceilings), remote monitoring and diagnostics, combustion system tuning services, and an on-site technical advisor. The manufacturer would be required to maintain the reliability, output and efficiency of the unit, as well as NOx and CO emissions and turbine vibration. It also would limit the duration of scheduled outages;⁸⁸⁰ and

⁸⁷⁸ Direct Testimony and Exhibits of Robert A. Breedlove, Docket No. UD-16-02, at 7:9-21 (June 20, 2016) ("Breedlove-1").

⁸⁷⁹ Supplemental and Amending Direct Testimony and Exhibits of Robert A. Breedlove, Docket No. UD-16-02, at 2:19-20 (July 6, 2017) ("Breedlove-3"); Todd-3 at 4:6-8; 8:19-20.

⁸⁸⁰ Breedlove-1 at 8:5-12.

WHEREAS, ENO says that maintenance costs on a non-variable or transactional basis would be recovered in base rates,⁸⁸¹ however if an LTSA is executed before the COD, ENO requests authorization to recover the LTSA expenses through the fuel adjustment clause (“FAC”).⁸⁸² ENO asserts that use of the FAC for recovery of LTSA costs is appropriate because (1) the expenses are variable to the extent that major maintenance (and related payments) is based on utilization, including unit starts and run-time of the facility, and (2) customers pay actual LTSA costs when incurred.⁸⁸³ ENO says that recovery through base rates runs a risk that ENO will recover more or less than the actual costs incurred;⁸⁸⁴ and

WHEREAS, ENO states that LTSA expenses associated with Ninemile 6 and UPS are recovered through the FAC, but such recovery is non-precedential, therefore ENO must receive Council authorization in order to include NOPS LTSA expenses in the FAC;⁸⁸⁵ and

WHEREAS, ENO notes that recovery of MISO market settlement revenues and expenses associated with either NOPS Alternative would occur through the FAC, as currently-approved, except that administrative expenses and revenues would be recovered through ENO’s MISO Cost Recovery Rider;⁸⁸⁶ and

WHEREAS, the Advisors recommend against ENO’s requested approach for recovery of LTSA costs. The LTSA costs are primarily fixed costs similar to traditional project fixed maintenance costs, and should be recovered through base rates using appropriate cost allocations,

⁸⁸¹ Direct Testimony and Exhibits of Orlando Todd, Docket No. UD-16-02, at 11:7-12 (June 20, 2016) (“Todd-1”); Todd-3 at 9:13-15.

⁸⁸² Todd-1 at 10:8-17; Todd-3 at 8:20-23.

⁸⁸³ Todd-1 at 10:12-17; Todd-3 at 8:23-9:8; ENO Post-Hearing Brief at 153-154.

⁸⁸⁴ Todd-1 at 10:12-17; Todd-3 at 8:23-9:8.

⁸⁸⁵ Todd-1 at 10:21-11:2.

⁸⁸⁶ Todd-1 at 11:16-21; Todd-3 at 9:20-10:3.

rather than through the FAC as proposed by ENO. LTSA costs can vary somewhat, however, they do not tend to fluctuate widely to the extent that fuel costs do;⁸⁸⁷ and

WHEREAS, the Advisors argue, and ENO concedes, that not all variable costs go into the FAC.⁸⁸⁸ The primary purpose of the FAC is to recover fuel costs.⁸⁸⁹ The LTSA does not directly include any fuel costs;⁸⁹⁰ and

WHEREAS, Advisors' witness Mr. Prep reviewed treatment of LTSA costs in other retail jurisdictions and found that the general consensus among regulatory bodies is to recover LTSA costs in base rates.⁸⁹¹ ENO witness Ms. Lovorn-Marriage noted that the LPSC has allowed recovery of LTSA costs associated with combined cycle units through ELL's FAC.⁸⁹² However, the record contains no details on the details of those approvals; and

WHEREAS, the Advisors assert that allowing ENO to recover its LTSA maintenance costs for NOPS through the FAC rider would include more fixed costs in ENO's FAC at a time when the Council should be considering in the Combined Rate Case the elimination of such occurrences in the interest of an equitable cost allocation among the rate classes. The FAC was originally designed to flow variable costs such as fuel through to ratepayers on a per-kWh of usage basis. Continued loading in the FAC of fixed costs that do not vary with kWh use is contrary to this intent and results in improper allocation of those costs. LTSA costs are expected to be regularly occurring and predictable.⁸⁹³ As such, ENO should be allowed to recover any

⁸⁸⁷ Prep-1 at 24:9-25:5; Hr'g Tr. 12/19/17, 141:18-23.

⁸⁸⁸ Hr'g Tr. 12/19/17, 10-23; 142:9-14, 143:1-13.

⁸⁸⁹ Hr'g Tr. 12/19/17, 140:25-141:3.

⁸⁹⁰ Hr'g Tr. 12/19/17, 145:14-18.

⁸⁹¹ Prep-1 at 25:8-14.

⁸⁹² Rebuttal Testimony and Exhibits of Shauna Lovorn-Marriage, Docket No. UD-16-02, at 7:12-17 (Nov. 30, 2017) ("Lovorn-2").

⁸⁹³ Advisors' Post-Hearing Brief at 135; Prep-1 at 24:9-11.

prudently incurred LTSA costs through the same cost recovery mechanism that the Council ultimately approves for all other NOPS fixed/non-fuel costs;⁸⁹⁴ and

WHEREAS, NOCS agrees with Advisors that the LTSA costs are fixed and predictable and should not be recovered through the FAC;⁸⁹⁵ and

WHEREAS, the Council is not persuaded that ENO has demonstrated that LTSA costs are appropriate for inclusion in the FAC, as opposed to recovery through base rates. First, based on the record, the execution of an LTSA is speculative at this point. Second, there is no evidence that anticipated LTSA costs would fluctuate widely or be so unpredictable as to warrant that they be treated separately from other O&M costs associated with the project. LTSA costs are primarily fixed costs similar to traditional project fixed maintenance costs, and should be recovered through base rates using appropriate cost allocations, rather than through the FAC as proposed by ENO; and

Rate Impact

WHEREAS, ENO estimates the typical monthly bill impacts of the two proposed NOPS units as follows:

	RICE Alternative	CT Alternative
Residential (1000 kWh)	\$7.19	\$5.61
Commercial (9,125 kWh)	\$65.62	\$51.16
Industrial (91,250 kWh)	\$656.19	\$511.57

WHEREAS, Advisors' witness Mr. Watson explains that in estimating typical monthly bill impacts, ENO first calculated an incremental supply cost by case and by year (*i.e.*, an incremental revenue requirement impact). ENO then levelized and unitized these incremental supply costs by calculating their present value (PV) across 17 years and then dividing that PV

⁸⁹⁴ Prep-1 at 24:11-25:2.

⁸⁹⁵ NOCS Post-Hearing Brief at 37.

value by the PV of forecasted MWh sales across the same timeframe, resulting in a levelized \$/kWh bill impact for each case (a single \$/kWh value for all rate classes similar to the per-kWh cost allocation methodology in the existing PPCACR Rider). ENO then multiplies its levelized \$/kWh bill impact by a typical monthly consumption by rate class to present a levelized \$/mo typical bill impact;⁸⁹⁶ and

WHEREAS, Advisors’ witness Mr. Watson disagreed with ENO’s methodology and instead estimated the monthly bill impact based on an allocation of fixed costs among the rate classes (based on 2016 base-rate revenues), and an allocation of variable costs based on kWh consumption (*i.e.*, using the cost recovery method suggested by Advisors’ witness Mr. Prep).⁸⁹⁷ Advisors’ witness Watson then estimated typical monthly bill impacts under several scenarios as follows;⁸⁹⁸ and

Typical Monthly Bill Impact (Reflects a MISO PRA MCP of \$6.00/kW-year and an ROE of 9.75%)			
Case	Residential Typical Bill Impact (1,000 kWh/mo)	Commercial Typical Bill Impact (9,125 kWh/mo)	Industrial Typical Bill Impact (91,250 kWh/mo)
Cases w/o Additional DSM Measures			
RICE Alternative	\$6.43	\$44.87	\$333.84
CT Alternative	\$6.79	\$47.75	\$360.26
Cases w/ the Council’s 2% DSM Goal			
RICE Alternative	\$22.41	\$160.13	\$1,170.70
CT Alternative	\$22.81	\$163.31	\$1,199.08

⁸⁹⁶ Watson-1 at 13:7-14:2.

⁸⁹⁷ Watson-1 at 14:14-16.

⁸⁹⁸ Watson-1 at 15:2.

WHEREAS, the DSM bill impacts were modeled using the costs of achieving the Council's 2% DSM Goal as estimated by Navigant in its June 2017 DSM Potential Study;⁸⁹⁹ and

WHEREAS, ENO disagrees with the Advisors' billing impact estimates. According to ENO witness Mr. Cureington, the Council's 2% DSM Goal is unachievable and unsustainable over the long-term planning horizon. He also says that the assumed MISO PRA clearing prices will not remain constant over the planning horizon. He says that the Advisors' assumptions are not reasonable, and therefore the Advisors' estimated bill impacts are not reasonable;⁹⁰⁰ and

WHEREAS, ENO's estimate uses an assumed ROE of 11.04%, while Advisors' witness Mr. Watson used an ROE of 9.75% in his estimates.⁹⁰¹ Employing a 9.75% ROE as compared to the 11.04% ROE reduces the rate impact estimates;⁹⁰² and

WHEREAS, the Advisors do not advocate any specific ROE at this time.⁹⁰³ They assert it should be evaluated as part of the Combined Rate Case. However, the Advisors note that 9.75% is in line with ROEs recently set by retail regulators;⁹⁰⁴ and

WHEREAS, Joint Intervenors agree with the Advisors that the proposed ROE should be evaluated as part of the rate case. They argue that ENO's assumed 11% ROE is too high and would likely result in a windfall to ENO;⁹⁰⁵ and

WHEREAS, the Advisors recommend that the Council use their billing impact estimates to assess potential the potential impact of NOPS on customers.⁹⁰⁶ Apart from the disagreement regarding achievability of the Council's 2% DSM Goal or the impact of MISO market prices,

⁸⁹⁹ Watson-1 at 15:6-8.

⁹⁰⁰ Cureington-7 at 8:5-11.

⁹⁰¹ Watson-1 at 19:14-15.

⁹⁰² Watson-1 at 21:3-8.⁹⁰³ Watson-1 at 17:14-18:8; 18:12; 19:3.

⁹⁰³ Watson-1 at 17:14-18:8; 18:12; 19:3.

⁹⁰⁴ Watson-1 at 17:1-13; 18:12-16.

⁹⁰⁵ Joint Intervenors' Post-Hearing Brief at 104.

⁹⁰⁶ Advisors' Post-Hearing Brief at 139.

ENO's assumed higher ROE has the effect of pushing up the cost estimates, which in turn affects the rate impact estimates;⁹⁰⁷ and

WHEREAS, Joint Intervenors also ask the Council to take steps to mitigate any financial risk to ratepayers associated with the MISO capacity markets or with construction cost overruns.⁹⁰⁸ They ask the Council to condition any approval of NOPS (1) by requiring ENO to bear the shortfall in actual capacity market sales revenue compared to their expected sales level, which Joint Intervenors believe is too optimistic; and (2) by imposing a construction-costs recovery cap at the projected costs amounts set forth in ENO's application. Specifically, Joint Intervenors request that ENO be required to bear the costs if the MISO capacity market does not reach at least 60% of the CONE by 2022 and remain at or above that level throughout the planning horizon. The 60% of CONE price, Joint Intervenors argue, is the lowest capacity market auction price ENO agreed to study.⁹⁰⁹ And with respect to construction costs, Joint Intervenors urge the Council to disallow recovery of costs beyond ENO's contingency budget (which is based on a 50% confidence interval), or to require ENO to submit revised cost estimates using a 95% confidence interval for the contingency budget;⁹¹⁰ and

WHEREAS, the Council finds the Advisors' bill impact calculations to be based on more reasonable assumptions and therefore to be more convincing than ENO's rate impact calculations and notes that the Advisors' bill impact calculations show the RICE Alternative to have a slightly lower impact on customer bills than the CT Alternative; and

WHEREAS, the Council notes that the request by the Joint Intervenors that the Council condition any approval of NOPS by requiring ENO to bear the cost of any shortfall in actual

⁹⁰⁷ Advisors' Post-Hearing Brief at 139.

⁹⁰⁸ Joint Intervenors' Post-Hearing Brief at 104-105.

⁹⁰⁹ Joint Intervenors' Post-Hearing Brief at 105, *citing* Cureington-6, Ex. SEC-12 at 8; Hr'g Tr., 12/18/17, 203:19-204:23.

⁹¹⁰ Joint Intervenors' Post-Hearing Brief at 105.

capacity market sales revenue from the gas plant if the MISO capacity market does not reach at least 60% of CONE by 2022 and to impose a construction-costs recovery cap at the presently quoted amounts in ENO's application, preventing ENO's recovery of construction costs beyond the level of ENO's contingency budget was made for the first time in the Joint Intervenor's Post-Hearing Brief, and therefore no other party, including ENO, has had opportunity to respond to this request in any way; and

WHEREAS, the Council also notes that it is obligated to set rates at a just and reasonable level, which includes the obligation to allow the utility an opportunity to recover its prudently incurred costs and a reasonable rate of return on its investment.⁹¹¹ The Council finds, however, that there is no evidence in the record that the conditions requested by the Joint Intervenor's will result in a just and reasonable rate that is fair to ratepayers and allows the utility to recover its prudently incurred costs and a reasonable rate of return on its investment. The Council, therefore, will deny the Joint Intervenor's request; and

WHEREAS, as is discussed above, the Council will evaluate ENO's cost recovery related to the NOPS project in the Combined Rate Case; and

Monitoring Plan

WHEREAS, ENO proposes reporting to the Council quarterly on the status of NOPS and provided a proposed monitoring plan;⁹¹² and

WHEREAS, Advisors' witness Mr. Rogers generally agrees with the proposed monitoring plan, but recommends that the Council build in the ability to modify the reporting to the extent that it desires additional information and such information is available and does not

⁹¹¹ See *Bluefield Water Works & Improvement Co. v. W. Va. Pub. Serv. Comm'n*, 262 U.S. 679 (1923); see also *Federal Power Comm'n v. Hope Natural Gas Co.*, 320 U.S. 591 (1944). See also, Prep-1 at 12:11-14.

⁹¹² Rogers-1 at 3:16-18, 49:13-19.

place an undue burden on ENO.⁹¹³ The Advisors note that quarterly reports typically provide only summary-level information, and suggest that the Council will want to fully understand developments, particularly if there are changes in costs or project schedule;⁹¹⁴ and

WHEREAS, ENO states that its monitoring plan is essentially uncontested and reasonable, and agrees to the Advisors' proposed modifications to its plan;⁹¹⁵ and

WHEREAS, Air Products states that it supports the position of the Advisors on the monitoring plan;⁹¹⁶ and

WHEREAS, the Council agrees that it may at some point wish to have additional information. Because ENO has agreed to Mr. Rogers' proposed modifications, the Council will accept the proposed monitoring plan as modified, and believes that monitoring and reporting requirements as modified by Advisors' witness Rogers are appropriate; and

WHEREAS, the omission from this decision of any argument or portion of the record that may exist or may have been raised by the participants in their briefs does not mean that it has not been considered. All such arguments and portions of the record have been evaluated and found to add nothing further to the substance or effect of this decision; now therefore:

BE IT RESOLVED BY THE COUNCIL OF THE CITY OF NEW ORLEANS
THAT:

1. The Council finds that the NOPS RICE Alternative serves the public convenience and necessity and is in the public interest, and therefore prudent.
2. ENO shall have a full and fair opportunity to recover all prudently incurred costs associated with the RICE Alternative.
3. The cost recovery of the NOPS project fixed costs shall be evaluated during the Council's consideration of the Combined Rate Case to be filed in 2018, and cost recovery shall be accommodated through a two-step rate adjustment as recommended

⁹¹³ Rogers-1 at 49:8-12.

⁹¹⁴ Advisors' Post-Hearing Brief at 139.

⁹¹⁵ ENO Post-Hearing Brief at 154.

⁹¹⁶ Air Products Post-Hearing Brief at 4.

by the Advisors. After the Council's complete vetting of the revenue requirement impacts of the NOPS project relative to total ENO operations in the Combined Rate Case, the Council will decide on the timing of any step rate adjustments to reflect NOPS cost recovery that may be appropriate to correlate with NOPS date of commercial operation. If the Council does not establish an FRP in the Combined Rate Case, an evaluation of NOPS cost recovery and related revenue adjustment could occur with a decoupling mechanism consistent with the Council's guidance in Resolution No. R-16-103, to the extent that such a decoupling mechanism is approved in the Combined Rate Case.

4. Any costs associated with an LTSA should be recovered through base rates using appropriate cost allocations as determined in the Combined Rate Case.
5. ENO's proposed monitoring plan is approved, with an additional provision to be added: that the reporting requirement may be adjusted at the request of the Advisors unless ENO can demonstrate that such a request would create an undue burden on ENO.
6. ENO is required to demonstrate its compliance with all applicable laws and regulations by filing with the Council all permits granted, and orders or rulings issued by any local, state or federal agency with jurisdiction over the project, including, but not limited to the EPA and LDEQ.

THE FOREGOING RESOLUTION WAS READ IN FULL, THE ROLL WAS CALLED ON THE ADOPTION THEREOF AND RESULTED AS FOLLOWS:

YEAS:

NAYS:

ABSENT:

AND THE RESOLUTION WAS ADOPTED.